Milpitas Transit Area Specific Plan

DRAFT PREFERRED PLAN

Development Issues and Potential Environmental Impacts

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Draft Preferred Plan

This memo analyzes the development issues and environmental impacts associated with the Milpitas Transit Area Concept Plan, adopted by The Milpitas City Council in April 2005. Based on these findings, the memo provides recommendations for refinements to the concept plan to take better account of opportunities and constraints. Topics analyzed include: market economics, fiscal impacts, traffic, urban design, infrastructure, public services, schools, and environmental issues.

This first section includes a description of the Transit Area Specific Plan project and the original concept plan, summarizes the recommended changes to the concept plan, and explains the Draft Preferred Plan and Draft Alternative Plan. The second section of the report discusses development issues and potential environmental impacts, detailing the research findings and analysis that resulted in the recommendations and the subsequent Draft Preferred and Alternative plans. References and appendices are located at the end of the document.

PROJECT DESCRIPTION

The Milpitas Transit Area Concept Plan builds upon previous planning studies to propose transit-oriented residential and commercial redevelopment on the existing industrial land around a future BART station. Goals for the project include: fostering Milpitas' image and regional identity; strengthening and expanding City tax revenues; providing housing and amenities and services such as parks, schools, retail, and restaurants; and promoting residences and high intensity mixed-use development near transit.

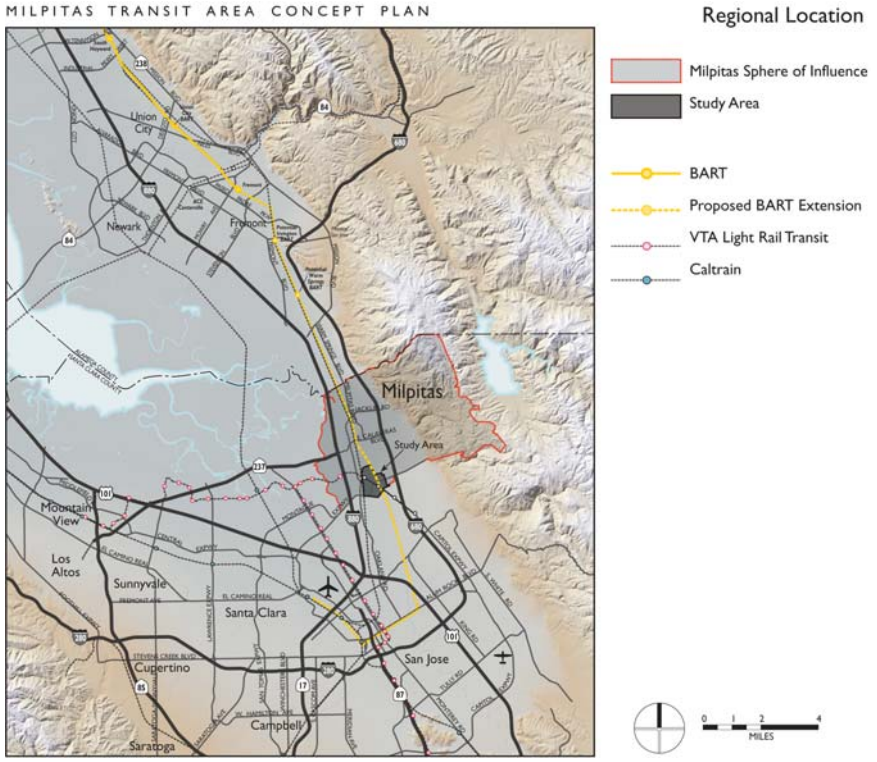


Figure A: Regional Location

The Milpitas Transit Area Concept Plan was approved by the Milpitas City Council in April 2005. It showed a concept plan and an alternative concept plan, and included recommendations regarding each subarea, the types of residential development, infrastructure requirements, phasing, and implementation. The City Council directed the preparation of a full specific plan and environmental impact report. This report is the first step in the preparation of those planning documents

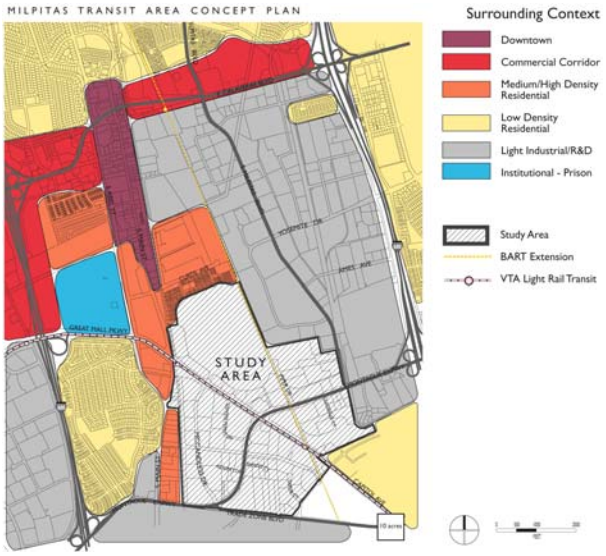


Figure B: Project Context

Figure C: Aerial View of the Study Area

MILIPITAS TRANSIT AREA CONCEPT PLAN

ORIGINAL CONCEPT PLAN

The original concept plan emphasized lifestyle retail development along with residential development. Key plan elements include:

- **Boulevard Commercial.** High-density retail and employment along Montague Expressway with a landscaped boulevard character. Opportunities to incorporate residential uses on upper floors or away from Montague Expressway.

  Permitted uses included retail, hotel, office and medical uses; up to 1 sq. ft. of housing permitted for every 2 sq. ft. of non-residential. FAR must be at least 1.5 and no more than 3.0.

- **Retail Mixed Use.** A strong retail core and hotel site along Great Mall Parkway. Either big box retail or lifestyle retail with housing and office on upper floors.

  Community and Regional Retail; Hotels also permitted; Housing or Office use permitted on upper floors. Maximum FAR of 3.0.

- **Very High Density Transit-Oriented Residential.** Residential mixed-use districts near BART and light rail stations.

  41-units per acre minimum average gross density; 60 un/ac maximum average gross density; 4-12 stories; gross densities of individual projects may be <40 or >60, provided that area development complies with average gross density; small local-serving retail permitted at ground floor.

- **High Density Transit-Oriented Residential.** Medium-density residential neighborhoods further from BART, at the interior of subareas.

  31-un/ac minimum average gross density; 60 un/ac maximum average gross density; 3-5 stories; gross densities of individual projects may be <30 or >60, provided that area development complies with average gross density; residential uses only.

Figures D, E, and F show possible images of the plan after completion. The original concept plan map is on the next page as Figure G; its legend follows as Figure H.

Figure D: Piper Montague area with high to very high density housing and parks near the light rail and the future BART station.

Figure E: Lifestyle retail with housing and offices above on McCandless Drive.

Figure F: Boulevard commercial and residential uses on Montague Expressway.

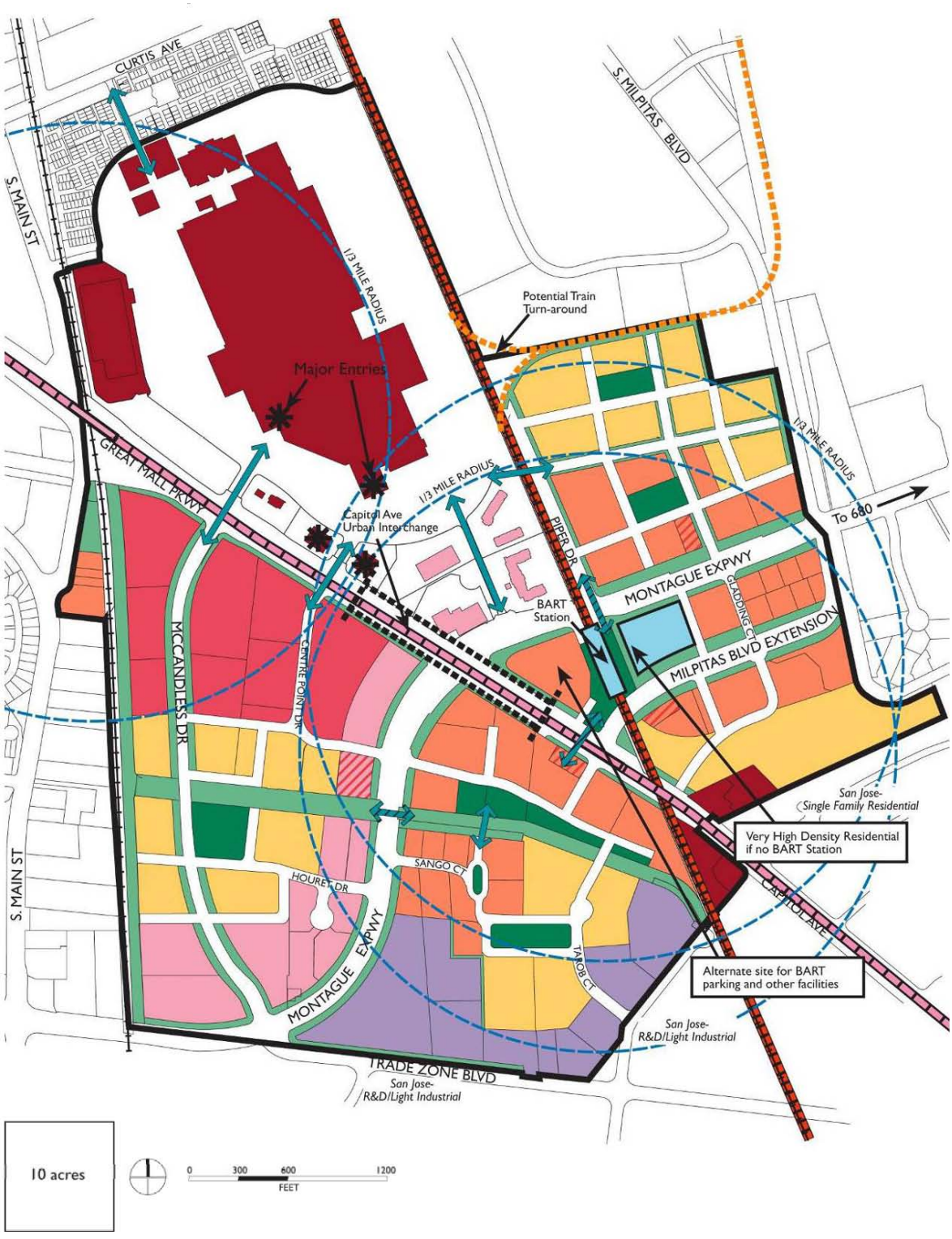
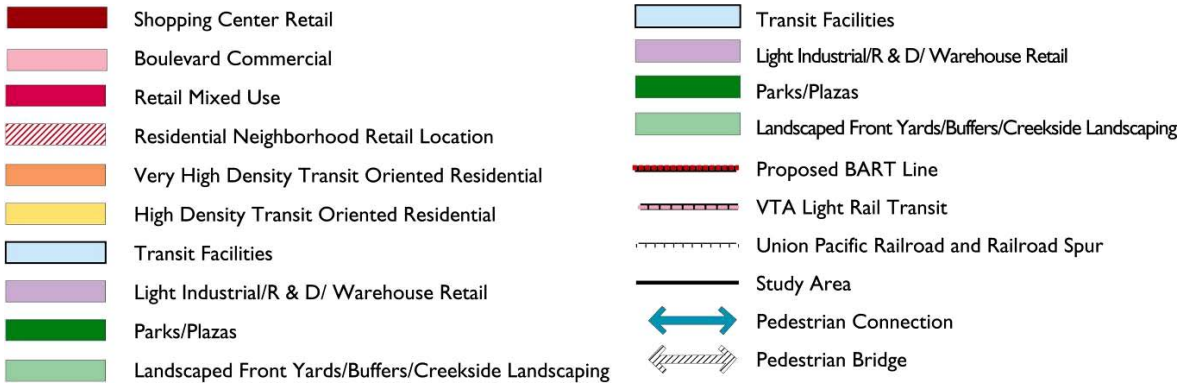


Figure G: Original Concept Plan

Figure H: Original Concept Plan map legend



Subareas

A series of existing boundaries, including thoroughfares, expressways, and railroad tracks, divides the Transit Area into five distinct subareas, which are shown in Figure I. Each subarea has a unique character at present that will develop further as Concept Plan ideas are put into place by new construction. The subareas are:

- Great Mall Retail;
- Great Mall/Montague;
- Montague/Trade Zone;
- BART Station Area; and
- Piper/Montague

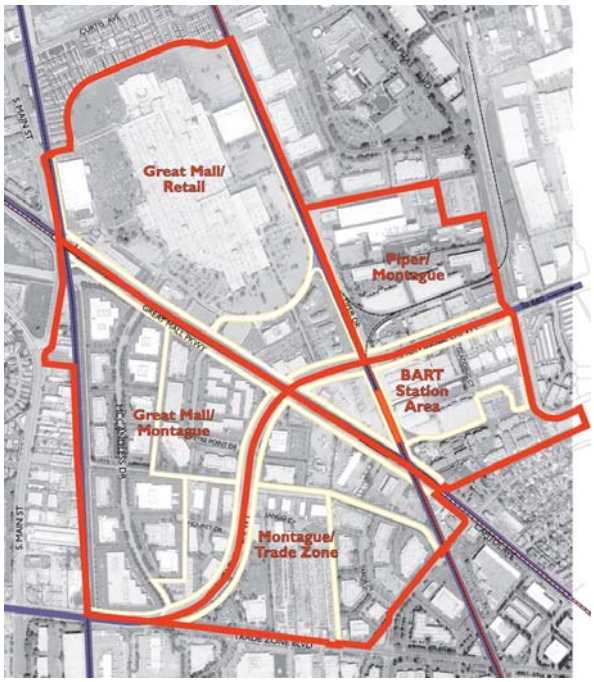


Figure I: Subareas

ALTERNATIVE CONCEPT PLAN

The alternative concept plan shifted the emphasis from retail to residential in the northern portion of the Great Mall/Montague subarea, across the street from the Great Mall. In this scenario, shown in Figure J, Great Mall Parkway is fronted with high density mixed use, and parcels behind the parkway frontage are designated high density transit oriented residential, expanding the residential neighborhood in the interior of the subarea. Great Mall Parkway would be lined with high density residential, hotel, or office uses, and retail and restaurant uses would be required at the ground floor. This scenario would not accommodate big box retail or a lifestyle retail mall, because those require larger and deeper lots and are a lower intensity use. There is a greater amount of residential development, and less retail and employment development, than in the concept plan. This scenario also introduces the High Density Mixed Use land designation, which assigns a higher range of intensities. It sets a minimum FAR of 2.0 and allows a maximum FAR of 4.0, in comparison to the maximum 3.0 FAR allowed in the Retail Mixed Use designation of the main concept plan.

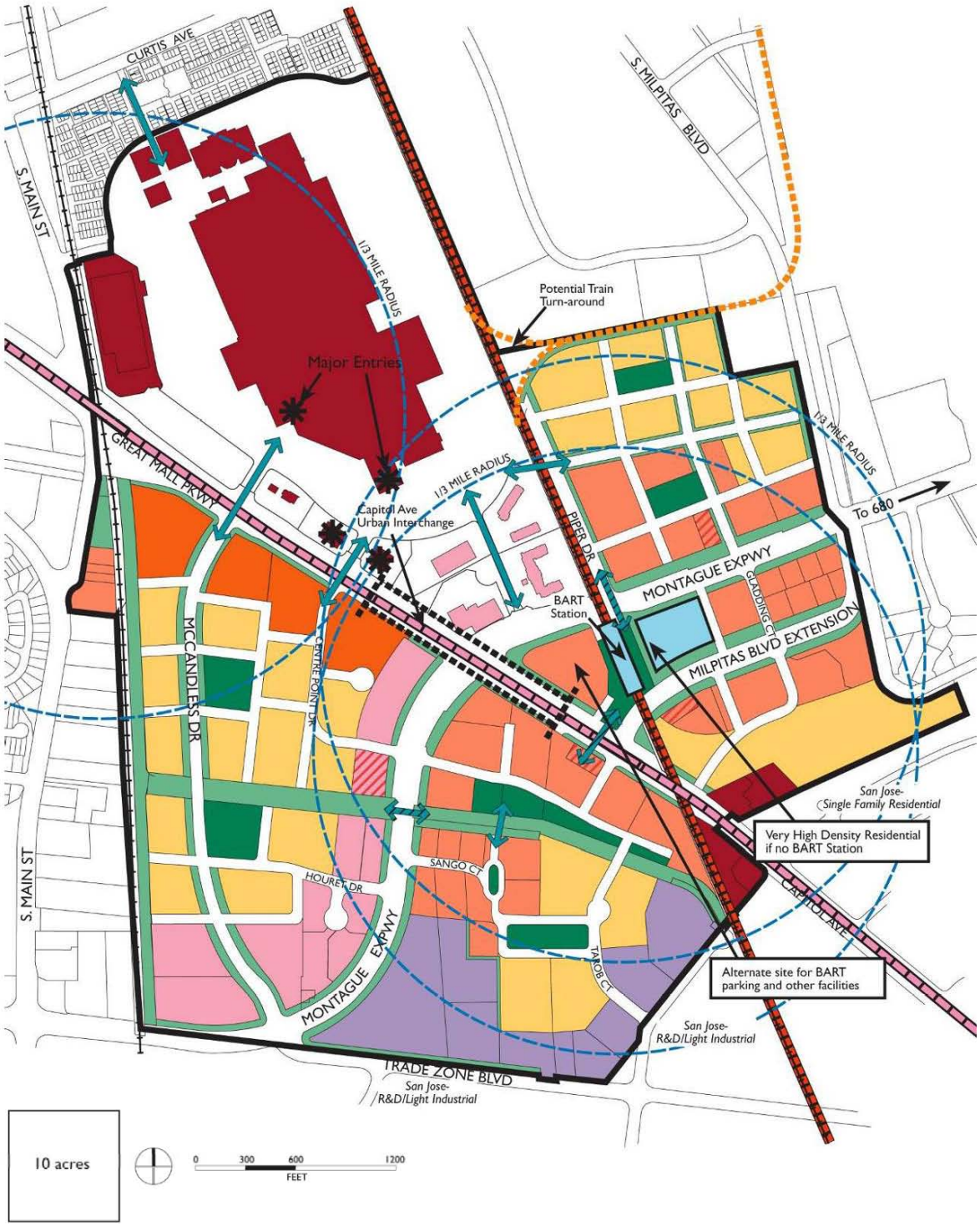


Figure J: Alternative Concept Plan

MAJOR CONCLUSIONS: DEVELOPMENT ISSUES AND POTENTIAL ENVIRONMENTAL IMPACTS

The following are the major conclusions from our analysis that lead to recommendations for revisions or refinements of the Concept Plan.

Market Analysis

Economic Research Associates conducted a comprehensive market demand analysis, analyzing existing supply and future demands over the 20 year planning timeframe.

Office. New office development should be targeted to around 800,000 square feet, based on potential market absorption.

Retail. There is demand for at least 500,000 square feet of new retail, based on the new residential units in Milpitas, unmet existing demand, and potential regional demand for an exciting pedestrian-oriented shopping area.

Hotel. Ultimately there will be demand for two hotel sites, and a total of 350 rooms. These are a very important revenue source for the city.

Residential. Market demand is projected at about 4,400 market-rate units. Affordable housing units will be added over and above this market demand.

Industrial/R&D. There is no market for more R&D space. The vacancy rate is currently 40 percent, far above the county average, and R&D will not be a viable economic use in this high-intensity transit location over the long run.

Fiscal Issues

ERA prepared a comprehensive fiscal impact model for the Transit Area Plan buildout, and reviewed it with the City Director of Financial Services.

Residential Development. The new residents will generate mandatory needs for all types of City services - public safety, recreation, etc. Much of the property tax revenues from new residential development will flow to the Redevelopment Agency instead of the City General Fund. If the total number of new housing units exceeds ±5,000 units, there would be a need for an increased Community Facility District assessment on properties in the area to ensure that there are adequate revenues to the General Fund to provide services.

Retail. Include enough retail development to meet demand. Otherwise other communities will develop retail to meet demand and Milpitas will lose the revenue opportunity. Retail is a big contributor to the City's fiscal stability, as it provides around one-third of the sales tax revenue for Milpitas. Retail development, particularly life style retail, will be important not only for the new sales tax it can bring to the City but also because it will induce higher quality hotel and residential development. The higher quality development will bring more tax revenue over time relative to the required service cost. The best opportunity for retail development within this planning area is the area across Great Mall Parkway from the front entrance of the Great Mall.

Hotel. Hotel uses bring in significant revenue and would have a great deal of synergy with the retail proposed. Relative to their size, land requirement and traffic impact, hotel development is highly productive in terms of General Fund revenue. This Transit Area is likely to have two or three short windows of hotel development opportunity in terms of market demand. The Specific Plan should at minimum reserve two hotel sites for future development. Developers and operators of full service hotels, which typically command higher rates and generate more food and beverage sales tax revenue than limited service hotels, will likely find this Specific Plan Area much more attractive if future development includes a "lifestyle retail" district of pedestrian scale offering a wide variety of restaurants augmented by specialty shops and entertainment venues.

Sewer and Water Capacity

Water Capacity. Preliminary evaluation expects up to 0.86 million gallons per day (mgd) of additional increase in water demand by the proposed Transit Area Specific Plan. Preliminary investigation indicates that there is additional water capacity to support the Specific Plan available from the Santa Clara Valley Water District.

Sewer Capacity. Preliminary evaluation expects up to 1 million gallons per day (mgd) of additional wastewater treatment capacity may be needed to handle the wastewater flow generated by the proposed Transit Area Specific Plan development. Excess capacity is available from the Water Pollution Control Plant through an interagency lease agreement or acquisition, similar to the purchase the City has arranged with West Valley Sanitation District. One mgd capacity is estimated to cost approximately $7 million in March 2006 dollars.

Traffic Analysis

A traffic analysis was completed to gain a preliminary understanding of the Transit Area Plan's potential traffic impacts. Existing levels of service at key intersections range from C to E; none are at F. Trips were calculated for three types of uses—commercial, hotel, office, and residential—and discounts applied for proximity to transit and a mix of land uses. Trips from existing industrial and research and development uses that will be replaced were subtracted. The average number of car trips per hour was then calculated for the AM and PM peak hours.

Impacts of Intersection Level of Service from New Development in the Transit Area

The traffic analysis completed to date only examines the impacts of Transit Area Plan development, and not other development in Milpitas or San Jose. The ultimate levels of service at intersections could be quite different once that other development is factored in. A full analysis using the VTA model, and analyzing up to 52 intersections and other cumulative growth, will be completed as part of the EIR for the Transit Area Specific Plan.

Key intersections were studied in Milpitas (7 in total) and San Jose (3 more), including the three main intersections in the study area—Milpitas Boulevard/Calaveras Boulevard (SR 237), Main Street/Montague Expressway, and Great Mall Parkway/Montague Expressway.

Three intersections are currently operating at level "E" during both AM and PM peak hours. All three are likely to go to an LOS of "F" in the Draft Preferred plan; two intersections go to "F" in the Draft Alternative Plan. The other seven intersections result in an LOS of C, D, or E.

Degree of Congestion Appropriate to Transit Areas

In high density urban areas, levels of service C, D, and E are typically considered acceptable during peak hours, especially near freeway/expressway exits. It is likely that under any development scenario—the current General Plan policies, the Draft Preferred Plan, or the Draft Alternative Plan—several of the intersections in the plan area will attain "F" levels of service sometime during the 25 year planning period. For many residents and commuters, both BART and the VTA Light Rail will offer an alternative to traffic congestion for at least some trips. Studies show that people are only motivated to use transit if there is some significant level of traffic congestion. Some level of traffic congestion is thus appropriate in areas where there is major public investment being made in transit infrastructure, and there is limited funding for new roads. Transit service would need to be frequent and available such that a transit trip does not add significantly more time to the commute.

Street Improvements and Traffic Mitigations

Several street improvements to the City and County network are planned over the next 20 years, which may help alleviate traffic problems. Key ones related to the study area include the extension of Milpitas Boulevard, and the widening of Montague Expressway and Calaveras Boulevard. The Environmental Impact Report to be prepared will identify other possible mitigations. However it will be critical to ensure the pedestrian-oriented character of the Transit Area, so that people can walk to transit, shopping, restaurants, etc. In some cases a street or intersection widening might help alleviate traffic congestion, but be highly detrimental to the overall character of the area. Those tradeoffs will be reviewed in discussions about the final recommended specific plan.

BART Station Design and Line Layout

BART Site. As currently proposed the BART parking structure is an extremely large structure that is overwhelming in scale relative to other buildings and will be highly detrimental to the development potential of surrounding sites. We strongly recommend a different approach to parking, bus drop-off, and kiss-n-ride which is compatible with an urban transit village district. We recommend relocating the parking garage to the corner (Kunde) site, and reducing the height so that it is not so bulky. This maximizes potential development sites and causes the least impact on new housing, because it is located on a site that is surrounded on all sides by major transportation infrastructure. Field Paoli Architects and Fehr & Peers Transportation Planners have studied in detail a site plan for the corner site that meets BART requirements for parking, bus drop-off, kiss-n-ride, etc., and provides reasonable auto access from Montague Expressway, Milpitas Boulevard, and Capitol Avenue.

BART Line overhead vs. enclosed trench. VTA plans to proceed with either the open-air retained cut layout or an aboveground BART line. City staff feels that an enclosed station with a plaza above it would a far superior alternative and supply Milpitas with an exciting urban place. An enclosed station would also enhance nearby property values by reducing train noise and the visual impacts of an elevated station and waiting commuters, and providing an urban plaza. While engineering and cost concerns are important, it is important to recognize that the station grade will play a large role in determining whether the Transit Area becomes a neighborhood with community identity and stability, or is merely a functional place to reside. A 35 percent design set of construction drawings has been prepared. VTA cannot on its own afford to put

the station into an enclosed tunnel, because it is cost prohibitive for them to provide mechanical ventilation.

Railroad Lines in the Piper/Montague Subarea

VTA has indicated that as part of the BART extension project, it may be cost effective to buy out or relocate the spur line to eastern industrial areas, or they may instead just build over or under the spur line crossing and leave the spur line in place. The City needs to push for relocation of the "Y" to the north and the buy-out or relocation of the railroad spur. The Piper/Montague subarea is a large developable area and removal of the "Y" and spur is critical to allowing successful residential development of a transit-oriented neighborhood adjacent to the new BART station. City staff should work with VTA staff to determine the cost of the buy-out and the amount of any landowner participation necessary.

School Demand

The estimated number of school-age children that will live in the housing units is 731 to 879 in the Milpitas United School District and 294 to 437 in the Berryessa Union and East Side Union High School districts. There will likely be a need to locate a combined elementary and middle school within the Milpitas Unified School District. It appears that the Berryesssa Unified School District (south of Montague Expressway) has capacity at its existing schools and properties.

Parks Needs and Requirements

Total Acreage. New public parks are required for the new residents. The acreage required is somewhere in the range of 28 to 36 acres, depending on which alternative is selected and the actual number of units finally constructed.

Types of Parks. In a high density transit-oriented development as envisioned here, small urban parks are the most appropriate type. Many of the residential units can look out onto a landscaped park, and these parks serve as a visual amenity which is critical for higher density housing, as well as a place for recreation. Some of the parks need to accommodate playing fields, as there is a huge demand for those facilities currently, which will only increase with new residents. There is also a need for a community center building where recreational programs could be held. A big open space for citywide events is also desired.

Public Safety Services

With the development of the Transit Area as proposed, the fire department will need at least one additional fire station and one or two engine companies. This station needs to be located in or near the plan area. There is not enough new demand for service expected to warrant a new police station. However, new staff and equipment will be required.

Environmental Issues

Environmental Science Associates (ESA) conducted preliminary research into potential environmental impacts.

Biological and Cultural Resources. There are no biological or cultural resources issues anticipated to be significant.

Air Quality, Noise, and Geology. Developments in the Transit Area will need to take steps to mitigate potential negative impacts related to: air quality, noise, and geologic hazards.

Hazardous materials sites. There is no known contamination at or near the proposed large park/community facilities site that would preclude its use. ESA is continuing to research the nature of other hazardous spills in the plan area, particularly in the Piper/Montague subarea.

RECOMMENDATIONS FOR REVISIONS TO THE CONCEPT PLAN

In response to the findings summarized above, we have refined the original concept plan. The new plan is known as the Draft Preferred Plan, and a variation that proposes less intense residential development is known as the Draft Alternative Plan. These revisions are described below, and are followed by a description of the Draft Preferred and Alternative plans.

It should be noted that the price of land in the Transit Area is rising as owners and developers anticipate the changes in allowable land uses and building densities the plan would permit. In addition, the stakeholder interviews indicated that most current property owners want their land to be designated for residential development, since they feel this will bring the most financial gain.

Amount of Residential Development

The fiscal impact analysis identified the amount of new residential development that would be fiscally neutral for the City at between 5,000 and 5,500 units. Therefore, an alternative plan with 5,600 units was prepared; proposed densities are lower than those proposed in the original concept plan. A draft preferred plan more consistent with the original densities of the concept plan is also included, since this can better achieve goals for transit ridership and neighborhood vitality, and an increase in the CDF assessment to $550 would provide adequate revenue for the development to be fiscally neutral for the City.

Amount of Office Development

The Maximum Floor Area Ratios proposed in the Concept Plan were lowered slightly to create a total amount of non-residential development that is more in line with the market demand analysis, and to minimize potential traffic impacts.

Land Use Flexibility on Montague

We propose a different land designation along Montague Expressway than originally proposed in the concept plan, in order to allow greater flexibility for either commercial or residential uses over a 20 year time frame. The rationale is that, given the strong streetscape plan that defines the area, land use can be mixed. The sites along Montague can accommodate either commercial or residential and still achieve a unified character. Also, this area deserves its own land use category because it is not pedestrian-oriented and has major access limitations from Montague Expressway.

Higher Densities Closer to BART

We recommend a high density overlay on sites closest to the BART-light rail transit node in order to support transit ridership and due to strong market interest in high density types of development. High density is particularly appropriate on wide streets where taller buildings fit

with the scale of the street, such as Montague Expressway, Capitol Avenue, and the Milpitas Boulevard Extension.

Retail Strategy

Based on the market analysis, we recommend that the project area include no less than 500,000 square feet of retail space. There is market demand for at least that much retail, and it will be a big contributor to the City's fiscal stability, as retail provides around one-third of the sales tax revenue for Milpitas. This retail will also feed the success of the Great Mall project and the proposed hotels, which are also very important to City finances.

We recommend that a major lifestyle/entertainment center with residential or office above it be built in the Great Mall-Montague subarea. The Mills Corporation has indicated the feasibility of this approach, saying it will not compete with the Great Mall, Valley Fair, Santana Row, or similar shopping centers in the area. It is feasible to have interested developers partner to achieve this result, which will require a critical mass of 200,000-250,000 square feet of retail, restaurant, and other commercial uses.

It is also critical for the project area to have:

- a 40,000-50,000 square foot grocery store, and
- neighborhood retail in the Piper, BART, and Trade Zone subareas—generally no more than 10,000 square feet apiece.

Miscellaneous other retail may be developed in mixed-use districts or along Montague Expressway.

In total, we suggest a minimum of 500,000 square feet of retail. To encourage this result, we recommend that the Great Mall/Montague subarea require a minimum of 200 square feet of retail for every 1,000 square feet of residential. This rule would exclude sites on Montague with limited access. Residential and retail developers would need to work together to meet this requirement.

Hotel Sites

At least two sites should be reserved for hotel development. The most promising is the site at the northern end of McCandless Drive, on the west side, across from the Great Mall. The other recommended location is at the northwest corner of Montague and Great Mall Parkway.

Grocery Store Site

It is also critical to have a 40,000-50,000 square foot grocery store in the project area to serve new residents. We recommend a potential three acre site at Montague and McCandless. This site will be the most accessible by car from the new development in the project area and those proposed along South Main.

McCandless Drive and Retail Orientation

Both of our urban design subconsultants expressed serious concern about orienting retail along the length of McCandless Drive. Field Paoli Architects design retail centers around the country, and Freedman Tang & Bottomley (FTB) designs retail streetscape projects throughout Califor-

nia. They both concurred that the street is too wide to facilitate crossover shopping on both sides of the street, and that the existing trees will block visibility and access. They recommended that regional retail and entertainment uses be located fronting onto Great Mall Parkway, and near the corner of Great Mall Parkway and McCandless. They further recommended that pedestrian-oriented retail be created on a new interior street connecting from McCandless towards Montague. Residential along McCandless Drive will benefit greatly from the existing trees. The trees are in good condition and will live beyond the timeframe of this plan.

Reduced Total Amount of R&D

We are proposing to reduce the total amount of R&D space in the Montague/Trade Zone subarea because market analysis shows even weaker demand for that use than initially believed. Existing R&D space in Milpitas has a vacancy rate of 40 percent, almost double the countywide vacancy rate. This, coupled with the high land costs anticipated for the project area, will make future development of low density R&D uses infeasible. We propose replacing R&D with mixed-use and residential development.

Brookfield Site

We recommend this site be designated for Boulevard Mixed-Use.

"Pick Your Part" Site

We propose re-designating this site to residential use, as currently zoned.

Other sites opposite San Jose properties

The commercial and industrial that fronts on Lundy Street should have a consistent land use with San Jose parcels across the street. Not all sites in the project area can be residential, due to fiscal impacts and the need to have a balanced mix of uses. The corner parcels at Trade Zone Boulevard and Lundy Street could accommodate neighborhood commercial or service uses in the future.

DRAFT PREFERRED PLAN & DRAFT ALTERANTIVE PLAN

Draft Preferred Plan and Projected Amount of New Development

Two plans—a preferred plan, and an alternative plan with reduced residential units—have been prepared so the City Council can consider tradeoffs between two competing policy goals. These plans will be referred to as the Draft Preferred Plan and the Draft Alternative Plan.

Based on the recommended densities, we have calculated the total buildout possible, and then estimated the amount that will actually be built during the 20 year timeframe. The Draft Preferred Plan proposes approximately 7,200 units of residential development, a high level of residential density near transit that maximizes transit ridership and creates a vibrant residential community. In comparison, the Draft Alternative Plan proposes around 5,600 units, a number that more closely approximates the anticipated market demand of 4,400 units plus 20 percent affordable units. The Draft Preferred Plan could result in a negative fiscal impact on the City, with the Redevelopment Agency capturing most of the property tax gain in the Transit Area. One possible solution is increasing the Community Facilities District fee for the new development, to $550 per year for the Draft Preferred Plan, as shown in Table A.

Table A: Community Facilities District Fee Proposal

	Status Quo	*Draft Preferred Plan*	*Draft Alternative Plan*
New Housing Units	2,000*	7,185	5,600
CDF (annual per housing unit)	$311	$550	$350

*Projected for Transit Plan area by Midtown Specific Plan

New residential neighborhoods are proposed in the Great Mall/Montague, Montague/Trade Zone, BART Station Area, and Piper/Montague subareas. The greatest potential for new dwelling units exists in Great Mall/Montague and Montague/Trade Zone. Table B shows the maximum and minimum number of housing units that would be generated as a result of the densities permitted under the plan. These numbers include both market-rate housing and the 20 percent affordable units required by the City's Municipal Code.

The critical number in the estimated buildout is called the Reasonable Worst Case Scenario (RWCS). This is the number that will be used for the Environmental Impact Report (EIR) analysis. RWCS is calculated as 90 percent of the midpoint between the minimum and maximum densities allowed, with the assumption that up to 90 percent of the opportunity sites will actually redevelop during the 20 year timeframe of the Plan. All numbers include existing uses that are expected to remain.

Table B: Dwelling Unit Projections

	Draft Preferred Plan	*Draft Alternative Plan*
Minimum	6,519	5,392
Maximum	9,448	7,054
Reasonable Worst Case Scenario (RCWS)	**7,185**	**5,601**

Non-residential development includes office, retail, and hotel uses, offering both employment opportunities and commercial services in the Transit Area. These uses are concentrated in Montague/Trade Zone and Great Mall/Montague, with the greatest amount of retail and commercial occurring along Great Mall Parkway and Montague Expressway. While no light industrial or R&D uses will be added, some existing ones in the southeastern part of the transit area are slated to remain. Table C shows the maximum and minimum floor area square footage as a result of the intensities permitted under the plan.

Table C: Non-Residential Floor Area Projections

	Draft Preferred Plan	*Draft Alternative Plan*
Total Office Area (square feet)		
Minimum	677,984	677,984
Maximum	1,129,444	1,016,976
RCWS	**813,343**	**762,732**
Total Retail Area (square feet)		
Minimum	505,901	459,233
Maximum	649,712	586,977
RCWS	**520,026**	**470,795**

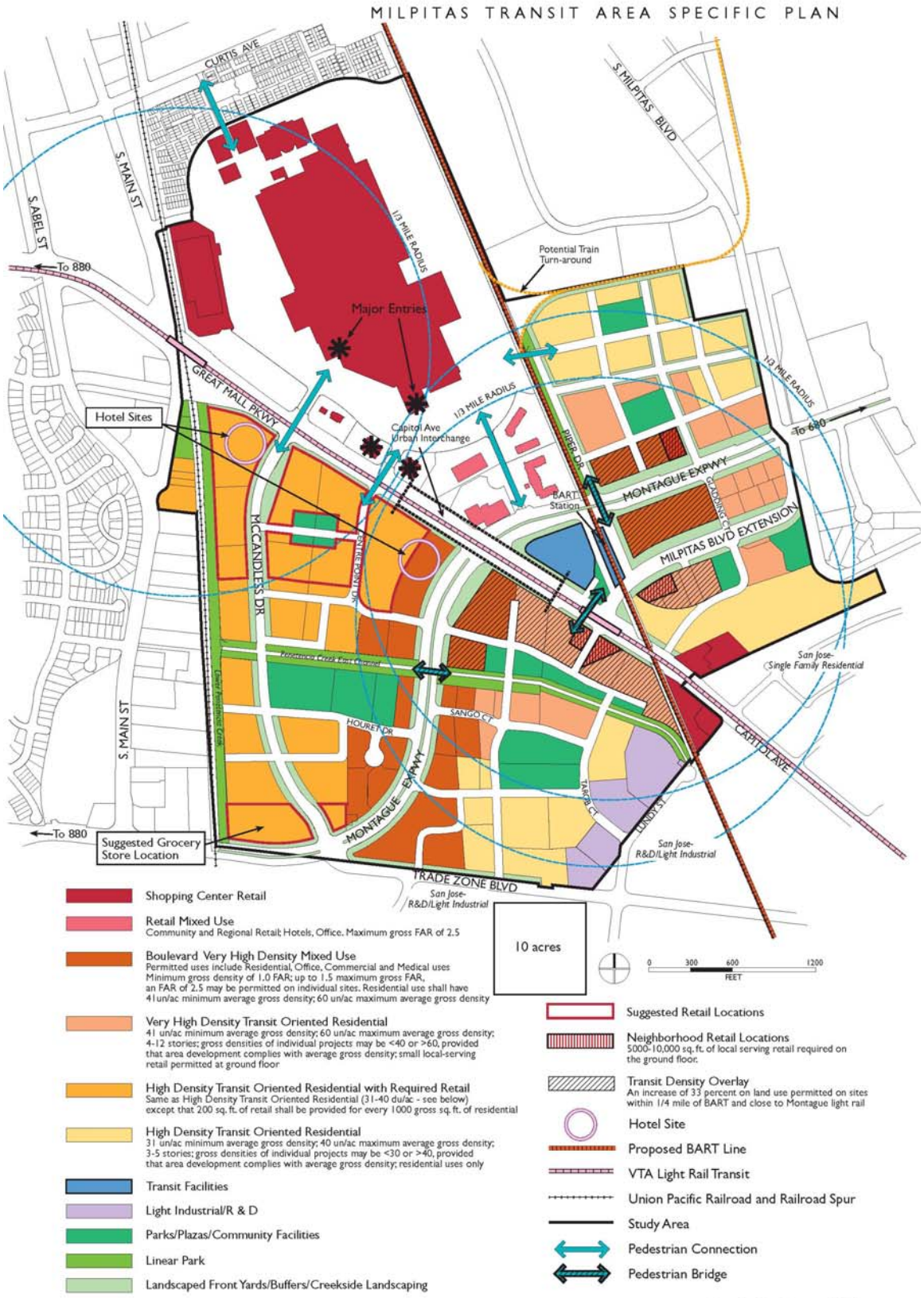
In each scheme, hotels are expected to accommodate 350 rooms.

Space is set aside for community uses within the Transit Plan area. Current City policy of the Midtown Specific Plan requires 2.0 acres of Public Park space per 1,000 residents, a target met through a combination of standard park space, linear parks, and landscaped yards and buffers. Land may also need to be set aside for a possible K-8 school for the Milpitas Unified School District. A new fire station may need to be sited within or nearby the plan area as well. Figure K shows the Draft Preferred Plan.

Draft Alternative Plan—Reduced Residential Proposal

The Draft Alternative Plan has an almost identical layout to the Draft Preferred Plan. It differs in its reduction of residential densities permitted in the Boulevard Mixed Use areas, and the removal of the "TOD Bonus" designation, an approach used in the Draft Preferred Plan to allow certain parcels near the BART station to receive a 25 percent density increase. Figure L shows the Draft Alternative Plan.

Figure K: Draft Preferred Plan



Milpitas Transit Area Specific Plan Buildout - *Draft Preferred Plan*

	BART Station Area	Great Mall/ Retail	Great Mall/ Montague	Montague/ Trade	Piper/ Montague	Total
Total Land Area (includes all streets)	***2,479,761***	***4,525,109***	***6,227,362***	***3,732,814***	***2,073,749***	***19,038,795***
Total Acres (includes all streets)	***56.93***	***103.88***	***142.96***	***85.69***	***47.61***	***437***
GSF (excludes exst public r-o-w)	**1,924,322**	**4,636,309**	**3,478,022**	**3,109,453**	**1,873,347**	***15,021,453***
Gross Acres (excludes exst public r-o-w)	**44.18**	**106.44**	**79.84**	**71.38**	**43.01**	***345***
New Residential						
Total Residential Units*						
Low	**860**	**-**	**2,241**	**1,979**	**1,439**	***6,519***
High	**1,420**	**-**	**2,944**	**3,059**	**2,025**	***9,448***
RWCS	*1,026*	*-*	*2,333*	*2,267*	*1,559*	*7,185*
New Non-Residential						
*Office (sq.ft.)**						
Low	***119,715***	***-***	***185,681***	***292,459***	***80,130***	***677,984***
High	***224,466***	***-***	***278,521***	***476,214***	***150,243***	***1,129,444***
RWCS	*154,881*	*-*	*208,891*	*345,903*	*103,668*	*813,343*
Hotel (sq.ft.)						
Low (350 Rooms @ 500sf/room)	*-*	*-*	***175,000***	*-*	*-*	***175,000***
High (430 Rooms @ 500sf/room)	*-*	*-*	***215,000***	*-*	*-*	***215,000***
RWCS	*-*	*-*	*175,500*	*-*	*-*	*175,500*
*Retail (sq.ft.)**						
Low	***10,986***	***38,954***	*397,624*	*49,332*	*9,006*	***505,901***
High	***22,399***	***38,954***	***510,367***	***59,692***	***18,299***	***649,712***
RWCS	*15,023*	*35,058*	*408,596*	*49,061*	*12,288*	*520,026*
Light Industrial (sq.ft.)						
Low	*-*	*-*	*-*	*-*	*-*	*-*
High	*-*	*-*	*-*	*-*	*-*	*-*
RWCS	*-*	*-*	*-*	*-*	*-*	*-*
Non-Residential Totals						
Low	**130,701**	**38,954**	**758,304**	**341,790**	**89,136**	**1,358,885**
High	**246,865**	**38,954**	**1,003,888**	**535,906**	**168,542**	**1,994,155**

Notes:

**** Residential Units and Office Square Footage assumes Boulevard Mixed Use at percentage indicated below***

Also includes Transit Density Overlay

***** Calculation of Retail Square Feet***

Required Retail in the ***Great Mall/Montague Subarea*** *(as a function of Residential Square Feet in the High Density Transit Oriented Residential use)*

"Hi TO Rtl" Units in Great Mall/Montague Subarea	*Great Mall/ Montague*	*Avg Unit Size (sq. ft.)*	*Res. Area (sq. ft.)*	*Req'd Retail 20%*
Low	*1,942*	*1,000*	*1,941,698*	*388,340*
High	*2,505*	*1,000*	*2,505,417*	*501,083*

Retail as component of BLVD VH MXD (5%)	*BART Station Area*	*Great Mall/ Retail*	*Great Mall/ Montague*	*Montague/ Trade*	*Piper/ Montague*	***Total***
Low	*5,986*	*-*	*9,284*	*14,623*	*4,006*	***33,899***
High	*5,986*	*-*	*9,284*	*14,623*	*4,006*	***33,899***

Required Local Serving Retail by Subarea	*BART Station Area*	*Great Mall/ Retail*	*Great Mall/ Montague*	*Montague/ Trade*	*Piper/ Montague*	***Total***
Low	*5,000*	*-*	*-*	*5,000*	*5,000*	***15,000***
High	*10,000*	*-*	*-*	*10,000*	*10,000*	***30,000***

Retail Floor Area on Plan						
Low	*-*	***38,954***	*-*	*29,709*	*-*	***68,662***
High	*-*	***38,954***	*-*	*29,709*	*-*	***68,662***

Total Retail Area in this Scheme	*BART Station Area*	*Great Mall/ Retail*	*Great Mall/ Montague*	*Montague/ Trade*	*Piper/ Montague*	***Total***
Low	***10,986***	***38,954***	***397,624***	***49,332***	***9,006***	***505,901***
High	***15,986***	***38,954***	***510,367***	***54,332***	***14,006***	***633,645***

****** Calculation of Park and Open Space Requirements***

Population		*BART Station Area*	*Great Mall/ Retail*	*Great Mall/ Montague*	*Montague/ Trade*	*Piper/ Montague*	***Total***
Number of dwelling units (low)		*860*	*-*	*2,241*	*1,979*	*1,439*	***6,519***
Number of dwelling units (high)		*1,420*	*-*	*2,944*	*3,059*	*2,025*	***9,448***
Number of People - Low	*Persons/DU*	*2,166*	*-*	*5,648*	*4,987*	*3,626*	***16,427***
Number of People - High	*2.52*	*3,579*	*-*	*7,419*	*7,708*	*5,103*	***23,808***

Park Requirements		*BART Station Area*	*Great Mall/ Retail*	*Great Mall/ Montague*	*Montague/ Trade*	*Piper/ Montague*	***Total***
3.5 ac park / 1000 pers (Midtown)	*Low Pop*	*7.58*	*-*	*20*	*17.45*	*12.69*	***57.49***
	High Pop	*12.53*	*-*	*25.96*	*26.98*	*17.86*	***83.33***
Required Public Parks	***Low Pop***	***4.32***	***-***	***11.27***	***9.95***	***7.23***	***32.77***
(57% of park space must be public)	***High Pop***	***7.14***	***-***	***14.80***	***15.38***	***10.18***	***47.50***

Public Open Space Provided	*BART Station Area*	*Great Mall/ Retail*	*Great Mall/ Montague*	*Montague/ Trade*	*Piper/ Montague*	***Total***
Linear Parks (acres)	*2.63*	*-*	*4.37*	*4.73*	*3.19*	***14.92***
Parks/Plazas (acres)	*-*	*-*	*9.32*	*3.53*	*1.00*	***16.51***
Linear Parks and Parks/Plazas Subtotal	***2.63***	***-***	***13.69***	***8.26***	***4.19***	***31.43***
Landscape Buffers (acres)	*6.12*	*-*	*11.28*	*4.45*	*6.19*	***28.04***
Total Open Space Provided	***8.75***	***-***	***24.97***	***12.71***	***10.38***	***59.47***

Gross Square Feet

	BART Station Area	Great Mall/ Retail	Great Mall/ Montague	Montague/ Trade	Piper/ Montague	Total
BART Trans	214,537					**214,537**
Blvd VH MXD	342,043		530,516	835,597	228,942	**1,937,098**
Hi TOD Res				828,744	1,038,210	**1,866,954**
Hi TOR Rtl			2,728,399			**2,728,399**
Hi TORes EX	572,147					**572,147**
Indus EXIST				385,695		**385,695**
Retail Ctr		111,296		84,882		**196,178**
Retail EXST	87,516	4,525,013				**4,612,529**
VH TOD Res	708,079			974,536	606,195	**2,288,810**
HOTEL			219,107			**219,107**
-						
Total	**1,924,322**	**4,636,309**	**3,478,022**	**3,109,453**	**1,873,347**	**15,021,453**
Percent	12.81%	30.86%	23.15%	20.70%	12.47%	

Gross Acreage

	BART Station Area	Great Mall/ Retail	Great Mall/ Montague	Montague/ Trade	Piper/ Montague	Total
BART Trans	4.93	-	-	-	-	**4.93**
Blvd VH MXD	7.85	-	12.18	19.18	5.26	**44.47**
Hi TOD Res	-	-	-	19.03	23.83	**42.86**
Hi TOR Rtl	-	-	62.64	-	-	**62.64**
Hi TORes EX	13.13	-	-	-	-	**13.13**
Indus EXIST	-	-	-	8.85	-	**8.85**
Retail Ctr	-	2.56	-	1.95	-	**4.50**
Retail EXST	2.01	103.88	-	-	-	**105.89**
VH TOD Res	16.26	-	-	22.37	13.92	**52.54**
HOTEL		-	5.03			**5.03**
-						
Total	**44.18**	**106.44**	**79.84**	**71.38**	**43.01**	**344.85**

Buildout Assumptions

	DU Min / Acre	DU Max / Acre	FAR Min	FAR Max	Notes:
BART Trans					
Blvd VH MXD	41	60	**1.00**	**1.50**	Assumes: 5% Retail, 35% Office and 60% Res.
Hi TOD Res	31	40			
Hi TOR Rtl	31	40	***	***	See calculation on Summary Sheet
Hi TORes EX			-	-	Existing use
Indus EXIST			-	-	Existing use
Retail Ctr			0.35	0.35	
Retail EXST			-	-	Existing use
VH TOD Res	41	60			
HOTEL					
-					

Transit Density Overlay Calculation

Area in Transit Density Overlay (acres)	BART Station Area	Great Mall/ Retail	Great Mall/ Montague	Montague/ Trade	Piper/ Montague	Total
Blvd VH MXD	7.85			6.56	5.26	**19.67**
VH TOD Res	6.11			13.71		**19.82**
						39.50

Transit Density Overlay Bonus (above Maximum)

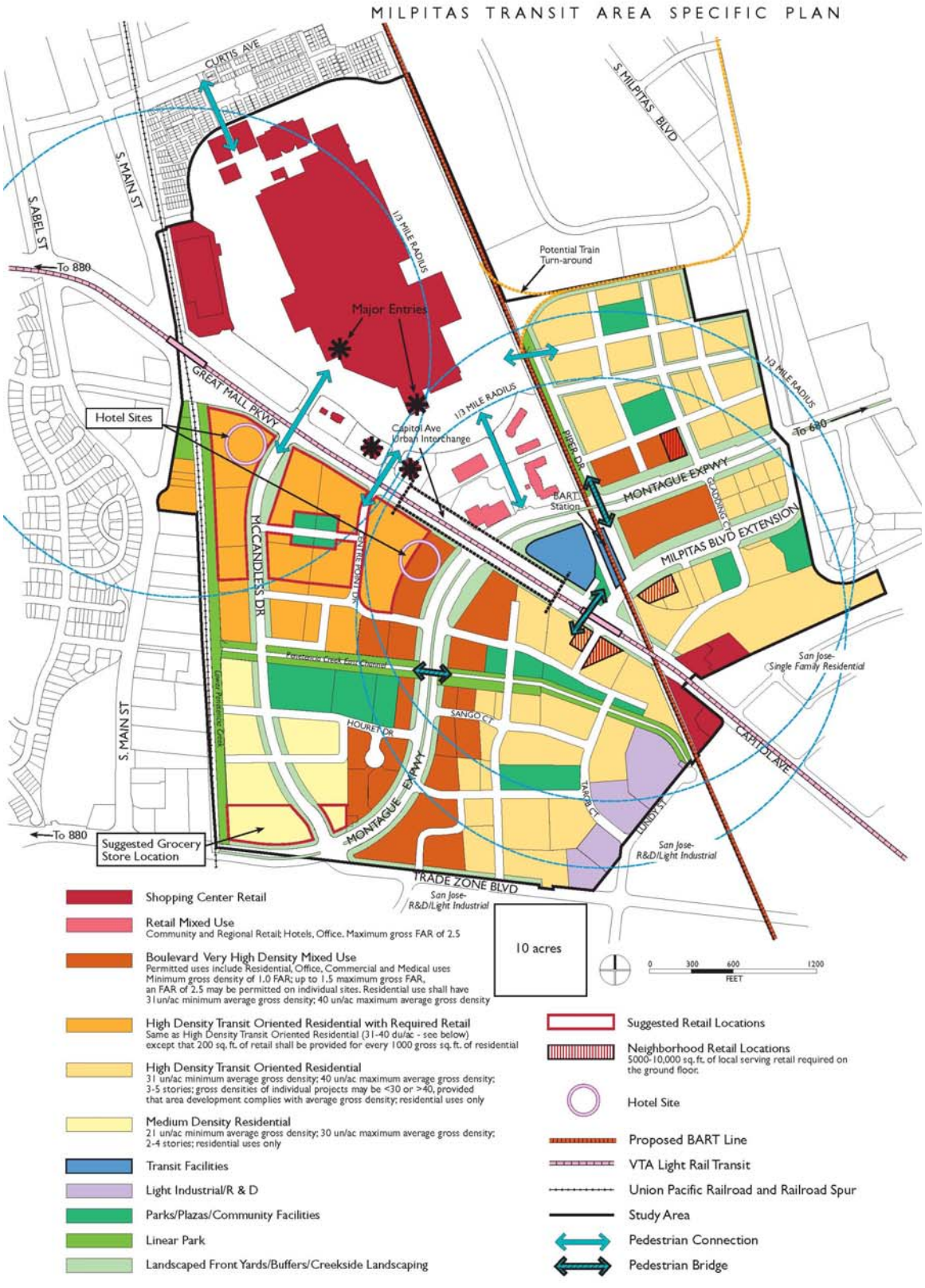
25%	DU / Acre	FAR Bonus
Blvd VH MXD	15	0.38
VH TOD Res	15	-

Transit Density Overlay Net Increase Residential	BART Station Area	Great Mall/ Retail	Great Mall/ Montague	Montague/ Trade	Piper/ Montague	Total
Blvd VH MXD	118	-	-	98	79	**295**
VH TOD Res	92	-	-	206	-	**297**
	209	**-**	**-**	**304**	**79**	**592**

Transit Density Overlay Net Increase Office	BART Station Area	Great Mall/ Retail	Great Mall/ Montague	Montague/ Trade	Piper/ Montague	Total
Blvd VH MXD	128,266	-	-	107,216	85,853	**321,336**
VH TOD Res	-	-	-	-	-	**-**
	128,266	**-**	**-**	**107,216**	**85,853**	**321,336**

Transit Density Overlay Net Increase Retail	BART Station Area	Great Mall/ Retail	Great Mall/ Montague	Montague/ Trade	Piper/ Montague	Total
Blvd VH MXD	128,266	-	-	107,216	85,853	**321,336**
VH TOD Res	-	-	-	-	-	**-**
	128,266	**-**	**-**	**107,216**	**85,853**	**321,336**

Figure L: Draft Alternative Plan



Milpitas Transit Area Specific Plan Buildout - *Draft Preferred Plan* - *Reduced Residential Alternative*

	BART Station Area	Great Mall/ Retail	Great Mall/ Montague	Montague/ Trade	Piper/ Montague	Total
Total Land Area (includes all streets)	***2,479,761***	***4,525,109***	***6,227,362***	***3,732,814***	***2,073,749***	***19,038,795***
Total Acres (includes all streets)	***56.93***	***103.88***	***142.96***	***85.69***	***47.61***	***437***
GSF (excludes exst public r-o-w)	**1,924,322**	**4,636,309**	**3,478,022**	**3,109,453**	**1,873,347**	***15,021,453***
Gross Acres (excludes exst public r-o-w)	**44.18**	**106.44**	**79.84**	**71.38**	**43.01**	***345***
New Residential						
Total Residential Units*						
Low	**650**	**-**	**1,935**	**1,640**	**1,167**	***5,392***
High	**839**	**-**	**2,564**	**2,116**	**1,535**	***7,054***
RWCS	*670*	*-*	*2,025*	*1,690*	*1,216*	*5,601*
New Non-Residential						
*Office (sq.ft.)**						
Low	***119,715***	***-***	***185,681***	***292,459***	***80,130***	***677,984***
High	***179,573***	***-***	***278,521***	***438,688***	***120,195***	***1,016,976***
RWCS	*134,680*	*-*	*208,891*	*329,016*	*90,146*	*762,732*
Hotel (sq.ft.)						
Low (350 Rooms @ 500sf/room)	*-*	*-*	***175,000***	*-*	*-*	***175,000***
High (430 Rooms @ 500sf/room)	*-*	*-*	***215,000***	*-*	*-*	***215,000***
RWCS	*-*	*-*	*175,500*	*-*	*-*	*175,500*
*Retail (sq.ft.)***						
Low	*10,986*	*38,954*	*350,956*	*49,332*	*9,006*	***459,233***
High	*15,986*	*38,954*	*463,700*	*54,332*	*14,006*	***586,977***
RWCS	*12,137*	*35,058*	*366,595*	*46,648*	*10,356*	*470,795*
Light Industrial (sq.ft.)						
Low	*-*	*-*	*-*	*-*	*-*	*-*
High	*-*	*-*	*-*	*-*	*-*	*-*
RWCS	*-*	*-*	*-*	*-*	*-*	*-*
Non-Residential Totals						
Low	**130,701**	**38,954**	**711,637**	**341,790**	**89,136**	**1,312,218**
High	**195,558**	**38,954**	**957,221**	**493,020**	**134,201**	**1,818,954**

Notes:

**** Residential Units and Office Square Footage assumes Boulevard Mixed Use at percentage indicated below***

***** Calculation of Retail Square Feet***

*Required Retail in the **Great Mall/Montague Subarea** (as a function of Residential Square Feet in the High Density Transit Oriented Residential use)*

"Hi TO Rtl" and "Med Res Rtl" Units in Great Mall/Montague Subarea	*Great Mall/ Montague*	*Avg Unit Size (sq. ft.)*	*Res. Area (sq. ft.)*	*Req'd Retail 20%*
Low	*1,708*	*1,000*	*1,708,360*	*341,672*
High	*2,272*	*1,000*	*2,272,079*	*454,416*

Retail as component of BLVD VH MXD (5%)	*BART Station Area*	*Great Mall/ Retail*	*Great Mall/ Montague*	*Montague/ Trade*	*Piper/ Montague*	***Total***
Low	*5,986*	*-*	*9,284*	*14,623*	*4,006*	***33,899***
High	*5,986*	*-*	*9,284*	*14,623*	*4,006*	***33,899***

Required Local Serving Retail by Subarea	*BART Station Area*	*Great Mall/ Retail*	*Great Mall/ Montague*	*Montague/ Trade*	*Piper/ Montague*	***Total***
Low	*5,000*	*-*	*-*	*5,000*	*5,000*	***15,000***
High	*10,000*	*-*	*-*	*10,000*	*10,000*	***30,000***

Retail Floor Area on Plan						
Low	*-*	***38,954***	*-*	*29,709*	*-*	***68,662***
High	*-*	***38,954***	*-*	*29,709*	*-*	***68,662***

Total Retail Area in this Scheme	*BART Station Area*	*Great Mall/ Retail*	*Great Mall/ Montague*	*Montague/ Trade*	*Piper/ Montague*	***Total***
Low	***10,986***	***38,954***	***350,956***	***49,332***	***9,006***	***459,233***
High	***15,986***	***38,954***	***463,700***	***54,332***	***14,006***	***586,977***

****** Calculation of Park and Open Space Requirements***

Population		*BART Station Area*	*Great Mall/ Retail*	*Great Mall/ Montague*	*Montague/ Trade*	*Piper/ Montague*	***Total***
Number of dwelling units (low)		*650*	*-*	*1,935*	*1,640*	*1,167*	***5,392***
Number of dwelling units (high)		*839*	*-*	*2,564*	*2,116*	*1,535*	***7,054***
Number of People - Low	*Persons/DU*	*1,638*	*-*	*4,876*	*4,133*	*2,940*	***13,587***
Number of People - High	*2.52*	*2,113*	*-*	*6,462*	*5,333*	*3,868*	***17,777***

Park Requirements		*BART Station Area*	*Great Mall/ Retail*	*Great Mall/ Montague*	*Montague/ Trade*	*Piper/ Montague*	***Total***
3.5 ac park/ 1000 pers (Midtown)	*Low Pop*	*5.73*	*-*	*17*	*14.47*	*10.29*	***47.55***
	High Pop	*7.40*	*-*	*22.62*	*18.67*	*13.54*	***62.22***
Required Public Parks	***Low Pop***	***3.27***	***-***	***9.73***	***8.25***	***5.87***	***27.11***
(57% of park space must be public)	***High Pop***	***4.22***	***-***	***12.89***	***10.64***	***7.72***	***35.46***

Public Open Space Provided	*BART Station Area*	*Great Mall/ Retail*	*Great Mall/ Montague*	*Montague/ Trade*	*Piper/ Montague*	***Total***
Linear Parks (acres)	*2.63*	*-*	*4.37*	*4.73*	*3.19*	***14.92***
Parks/Plazas (acres)	*-*	*-*	*9.32*	*3.53*	*1.00*	***13.85***
Linear Parks and Parks/Plazas Subtotal	***2.63***	***-***	***13.69***	***8.26***	***4.19***	***28.77***
Landscape Buffers (acres)	*6.12*	*-*	*11.28*	*4.45*	*6.19*	***28.04***
Total Open Space Provided	***8.75***	***-***	***24.97***	***12.71***	***10.38***	***56.81***

Gross Square Feet

	BART Station Area	Great Mall/ Retail	Great Mall/ Montague	Montague/ Trade	Piper/ Montague	Total
BART Trans	214,537					**214,537**
Blvd VH MXD	342,043		530,516	835,597	228,942	**1,937,098**
Hi TOD Res				828,744	597,052	**1,425,796**
Hi TOR Rtl			1,711,980			**1,711,980**
Hi TORes EX	572,147					**572,147**
Indus EXIST				385,695		**385,695**
Retail Ctr	-	111,296		84,882		**196,178**
Retail EXST	87,516	4,525,013				**4,612,529**
VH TOD Res	708,079			974,536	606,195	**2,288,810**
HOTEL			219,107			**219,107**
Med Res Rtl			1,016,419		441,158	**1,457,577**
Total	**1,924,322**	**4,636,309**	**3,478,022**	**3,109,453**	**1,873,347**	**15,021,453**
Percent	12.81%	30.86%	23.15%	20.70%	12.47%	

Gross Acreage

	BART Station Area	Great Mall/ Retail	Great Mall/ Montague	Montague/ Trade	Piper/ Montague	Total
BART Trans	4.93	-	-	-	-	**4.93**
Blvd VH MXD	7.85	-	12.18	19.18	5.26	**44.47**
Hi TOD Res	-	-	-	19.03	13.71	**32.73**
Hi TOR Rtl	-	-	39.30	-	-	**39.30**
Hi TORes EX	13.13	-	-	-	-	**13.13**
Indus EXIST	-	-	-	8.85	-	**8.85**
Retail Ctr	-	2.56	-	1.95	-	**4.50**
Retail EXST	2.01	103.88	-	-	-	**105.89**
VH TOD Res	16.26	-	-	22.37	13.92	**52.54**
HOTEL		-	5.03			**5.03**
Med Res Rtl	-	-	23.33	-	10.13	**33.46**
Total	**44.18**	**106.44**	**79.84**	**71.38**	**32.88**	**344.85**

Buildout Assumptions

	DU Min / Acre	DU Max / Acre	FAR Min	FAR Max	Notes:
BART Trans					
Blvd VH MXD	**31**	**40**	**1.00**	**1.50**	Assumes: 5% Retail, 35% Office and 60% Res.
Hi TOD Res	31	40			
Hi TOR Rtl	31	40	***	***	See calculation on Summary Sheet
Hi TORes EX			-	-	Existing use
Indus EXIST			-	-	Existing use
Retail Ctr			0.35	0.35	
Retail EXST			-	-	Existing use
VH TOD Res	**31**	**40**			
HOTEL					
Med Res Rtl	**21**	**30**			

Transit Density Overlay Calculation

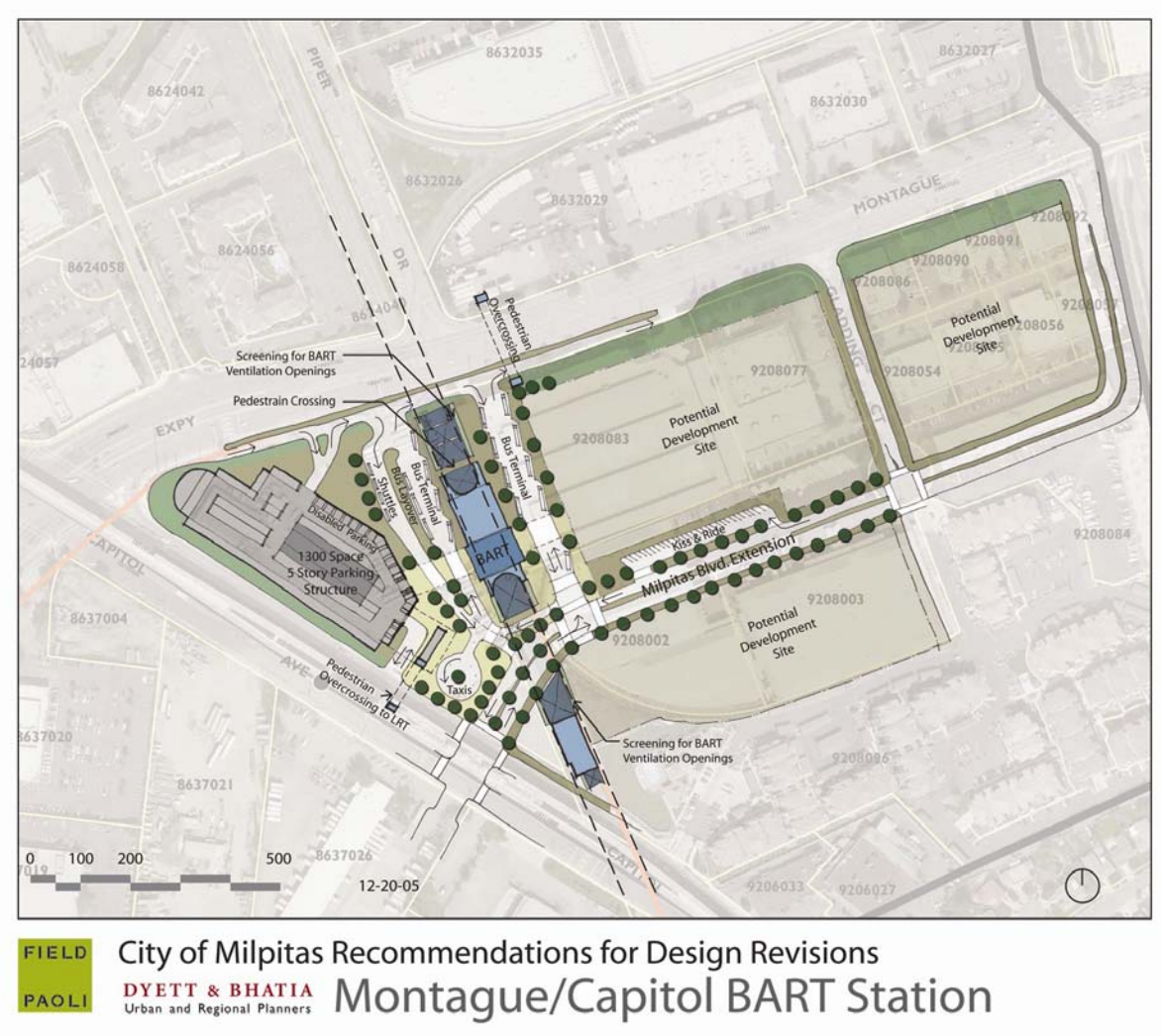
Area in Transit Density Overlay (acres)	BART Station Area	Great Mall/ Retail	Great Mall/ Montague	Montague/ Trade	Piper/ Montague	Total
Blvd VH MXD	7.85			6.56	5.26	**19.67**
VH TOD Res	6.11			13.71		**19.82**
						39.50

BART Station Area Layout

We strongly recommend a different approach to parking, bus drop-off, and kiss-n-ride which is compatible with an urban transit village district, rather than the sites and layout proposed by VTA. Our recommendations, as shown on the revised concept plan diagram in Figure M, are:

1. Relocate the parking garage to the corner (Kunde) site, and reduce the height from the seven stories proposed by the VTA. The proposed parking structure is very efficient: three bay layout five stories tall, with 260 spaces per floor for a total of 1,300 spaces
2. Access to the parking garage can be from both Capitol Avenue and Montague Expressway, with stacking lanes to keep cars off of those busy streets.
3. Locate the bus bays along streets; this is a more urban solution consistent with a transit village, and conserves space. The "bus yard" areas originally proposed would create a large paved area which is not pedestrian friendly.
4. Locate the kiss-n-ride and handicapped parking along Milpitas Boulevard extension.
5. Shorten the overall walking distances for pedestrians to the BART station, and make the connections pedestrian-friendly by reducing the travel lanes crossed. Use special paving in all areas indicated.
6. Create a BART Station plaza that concentrates pedestrian activity from the garage, the Capitol Avenue area, and kiss-n-ride.
7. Add a small retail building or kiosks between the LRT and BART stations, next to the plaza to serve BART riders, LRT riders, and residents. This will enliven the BART plaza. It can succeed due to street visibility, the concentration of pedestrian, and availability of short-term parking in the kiss-n-ride and on Milpitas Boulevard.
8. Locate a pedestrian overcrossing that connects the Piper-Montague area to the development site across Montague. Pedestrians can walk along the sidewalk and cross into the BART station entrance.
9. Add a 40 foot landscape buffer on Montague, consistent with the Transit Area Plan. Provide a 20 foot landscaped buffer along Capitol Avenue. Provide a 20 foot area for a sidewalk and double row of trees on the west side of the potential development site.
10. Widen the sidewalk and median on Milpitas Boulevard, and add street trees to provide adequate pedestrian circulation and enhance the residential character of the area
11. Add landscaping and attractive fencing around retained cut. Add a pedestrian crossing.

Figure M: Proposed BART Station Area Layout



Parks and Open Space

We have revised the proposed open space to be in line with City requirements. Around 36 acres of public park space is required for the Draft Preferred Plan, and around 28 acres for the Draft Alternative Plan. A series of neighborhood parks is intended to provide both active and passive recreation; creek side and street side landscaped buffers provide pedestrian connectivity; and larger parks would allow for sports field recreation and a community center. The revised plans provide the required acres of public parks, counting both parks and linear park areas along the drainage channels. There are also extensive landscaped front yard areas in the plan, which can be counted as public park space when it includes public trails or paths. Table D summarizes the amount of park space provided, and the amount required for the expected project population at buildout.

Table D: Public Parks and Open Space Provided (acres)

	Draft Preferred Plan	*Draft Alternative Plan*
Linear Parks	14.92	14.92
Parks/Plazas	16.51	13.85
Subtotal	*31.43*	*28.77*
Landscape Buffers-20% credit	5.6	5.6
Total Open Space Provided	**37.03**	**34.37**
Total Open Space Required	**36.1**	**28.2**

School Site

Residential development in the project area will generate enough school-age children to require a new elementary and middle school. Table E shows the number of children anticipated to be live in the Transit Area after full buildout.

Any future school site should include a joint use park, available to the City during non-school hours. State standards would require the school site to be 13-15 acres. However because this is an urban setting, a smaller school site can be approved by the State. The exact site size and configuration will need to be reviewed more extensively with the School District.

Table E: Projected Student Enrollment in Reasonable Worst Case Scenario

	Draft Preferred Plan	*Draft Alternative Plan*
Milpitas Unified School District		
Housing Units	*4,852*	*4,033*
K-6	585	486
7-8	98	81
9-12	196	163
Total Students	*879*	*731*
Berryessa Union & East Side Union HS districts		
Housing Units	*2,333*	*1,568*
K-5	226	152
6-8	104	70
9-12	107	72
Total Students	*437*	*294*

Development Issues & Potential Environmental Impacts

- Stakeholder Interviews
- Development Context—Midtown Specific Plan
- Economic and Development Issues
- Public Services and Facilities Required
- Transportation Issues
- Urban Design
- Environmental Issues

Development Issues & Potential Environmental Impacts

The City of Milpitas has established the following overall vision and goals for the Milpitas Transit Area:

- Transition from an R&D/industrial area to one that supports higher intensity mixed uses.
- Strengthen the city's tax base – provide opportunities for retail and hotel, ownership housing, and high-density employment uses.
- Build transit-oriented development around light rail and future BART stations, with an emphasis on housing to maximize transit ridership and meet regional housing/ transportation goals.
- Build quality neighborhoods and commercial districts that are desirable in the market place and hold their value over time.

These objectives are intended to balancing City goals for fiscal health and quality development, regional goals for housing and transportation, and property owner goals.

The development of the land in the Transit Area will be driven by land use designations and minimum and maximum density height and bulk regulations. To determine the impact of the plan on traffic, water supply, needed open space, and other factors, buildout was calculated through the "Reasonable Worst Case Scenario" (RWCS) method. RWCS is an estimate of the maximum amount of development that will likely happen as a result of the plan. We calculated it as 90 percent of the high-low midpoint of permitted development, with the assumption that up to 90 percent of sites will actually redevelop during the 20 year timeframe of the Transit Area Plan

1. STAKEHOLDER INTERVIEWS

Stakeholders within the Milpitas Transit Area were originally interviewed in November and December 2004. As part of the background research for the Specific Plan, some stakeholders (listed in Table 1-1) were re-interviewed in November 2005 to get updated information about development plans for their properties and other issues relevant to the specific plan. This section summarizes information learned from this recent round of stakeholder interviews.

Table 1-1: Stakeholders interviewed November 2005

Person	*Affiliation*	*Property*
Brad Kempf	Mills Corporation	Great Mall/Retail
Michael Fletcher	Arcadia Homes, Inc.	Great Mall/Montague
Carl Berg; Myron Crawford	Berg & Berg	Great Mall/Montague: McCandless Drive Sites

Wallace Murfit	First Industrial Realty Trust	Great Mall/Montague: Centerpoint Drive – four sites
Jeff Major	Barry Swenson Builder	Piper/Montague Area: property fronting on Milpitas Boulevard
Steve Schott	Citation Builders	Piper/Montague Area: Waukesha; Federal Express site on Montague
Jim Mirar	RMC	Piper/Montague Area: Piper Dr.
Stan Herstein	Property Owner	BART Station Area: between future Milpitas Blvd. and the Crossings, facing Capitol Ave
Chuck Shaeffer	Remington Pacific Corporation	Montague/Trade Zone: Roadway-owned site next to UP line and drainage channel
Evelyn Murphy, Josh Corzine, John Eudy; Greg Poncetta	Brookwood Financial Partners, Essex Property Trust, CB Richard Ellis	Montague/Trade Zone: Property at the corner of Montague and Trade Zone
Colin Grey, Ms. Meeks, Sherry Meeks, Dave Pernick	Property Owners – Pick Your Part	Montague/Trade Zone: Trade Zone Boulevard
Cindy Galfin	Pick Your Part – Lessee	Montague/Trade Zone: Trade Zone Boulevard
Tom and Vicki Williams	Enrollment Projections Consultants	Provide Services to All Three School Districts

INFORMATION ABOUT PROPERTIES BY SUBAREA

Great Mall/Retail

Major renovations of the Great Mall are being completed, and tenants are being moved around to create distinct retail neighborhoods within the mall (e.g., the fashion district). New tenants have been added, including Kohl's, Nike, Abercrombie & Fitch, Hollister; and negotiations are underway with other new tenants. Mills Corporation is preparing a 5-7 year plan, which they hope to submit to the City soon and obtain a more comprehensive, coordinated overall permit. Over that time frame they hope to add another entertainment venue and one or more new restaurants. Most of the uses would fit into the existing building, though a few small additional detached buildings may be proposed. They currently have enough parking; some additional parking could be needed depending on the specific mix of tenant types.

Mills is interested in considering future development on other sites in the transit area. A life-style outdoor pedestrian mall across from the Great Mall is seen as viable, based on the analysis that Mills has done about other malls and tenants in the South Bay. Uses would include restaurants, entertainment, and retail. It would be appropriate to do it as new housing is built, so that new residents help support the uses. Mills noted however that such a use cannot pay a land price equal to land prices for high density residential.

Great Mall/Montague

Many of the existing R&D buildings are vacant or have leases that expire in the next few years. There is great interest from residential developers in acquiring property in this area now that the concept plan has been developed, and some properties have already been sold. Prices anticipate adoption of the Specific Plan. Residential developers will pay much higher land prices than retail developers, and there is no interest in office development right now. The plan should provide for a variety of housing types in the area, so that the housing serves a variety of buyers and can be absorbed by the market. All of the property owners interviewed prefer the alternate concept plan rather than the concept plan, because it allows more residential development and less retail.

Piper/Montague

The three property owners in this area are proceeding with plans for residential development in this subarea. They strongly support the Transit Area Specific Plan, and are hoping it moves forward quickly. The developers agree that retail services and restaurants are an asset for residential, but it cannot be built and occupied until the residents are living in the area. All three property owners are working to assess and clean up soil contamination from older industrial uses; they all expect to receive "case closure" letters from the Regional Water Quality Control Board in the coming year.

BART Station Area

VTA plans to proceed with either the open-air retained cut layout or an aboveground BART line. City staff feels that an enclosed station with a plaza above it would a far superior alternative and supply Milpitas with an exciting urban place. An enclosed station would also enhance nearby property values by reducing train noise and the visual impacts of an elevated station and waiting commuters, and providing an urban plaza. While engineering and cost concerns are important, it is important to recognize that the station grade will play a large role in determining whether the Transit Area becomes a neighborhood with community identity and stability, or is merely a functional place to reside. A 35 percent design set of construction drawings has been prepared. VTA cannot on its own afford to put the station into an enclosed tunnel, because it is cost prohibitive for them to provide mechanical ventilation.

VTA hopes to acquire several properties surrounding the BART line to use for station facilities, construction staging, and future development. VTA's Board has directed staff to pursue property acquisition for future development sites, so that VTA could benefit financially in the long run from increased land prices around BART stations. There is strong interest from residential developers in sites within this subarea. Property owners interviewed support the concept plan, and hope that the Specific Plan moves forward expeditiously.

Montague/Trade Zone

There is strong interest in sites in this subarea on the part of residential developers. Property owners along Capitol Avenue are exploring development options under the new plan. At least one property on Tarob Court is currently on the market, and other owners may be interested in selling. Several stakeholders commented that they believe the market analysis may be underestimating the demand for residential units over the next 20 years.

Two property owners with land designated in the concept plan for industrial use believe very strongly that the land use for their property should be changed to residential. The landowners of the property leased by Pick Your Part strongly object to having a portion of their property rezoned back from residential to industrial. They intend to develop the property with residential in the near future. The owners of the property at the corner of Montague and Trade Zone have a large amount of vacant R&D space, and no prospects for leasing that space and stemming financial losses in the foreseeable future. A residential developer is interested in the property.

SCHOOL DISTRICT INFORMATION

Tom and Vicki Williams, Enrollment Projections Consultants, work for all three school districts that serve the Transit Area. They indicated that based on a very cursory preliminary review, it appears that the Berryessa and East Side Union High School District have sites large enough to absorb additional students, whereas the Milpitas Unified School District (MUSD) is at capacity and will certainly need an additional school site. The closest elementary school, Zanker Elementary, is near capacity, and there are several other new developments that will impact that school, including Park Metro, Park Place, and the new KB Home project on South Main Street. The nearest middle school in the MUSD is also at or over capacity. It is likely that a new K-8 school would be needed. The MUSD high school is also crowded far beyond capacity, but acquiring a new high school site within Milpitas would be prohibitive, so the district will likely add to or intensify facilities on the current site.

Mr. Williams provided current school generation rates for all three districts, differentiating elementary, middle, and high school generation rates, and market rate vs. affordable housing. He noted that there was very limited data for multifamily units in MUSD because there has not been much built in recent years. He pointed out that school generation rates change over time as young families mature into families with teenagers, and thus this should be considered in a 20 year plan.

Mr. Williams noted State requirements for locating schools away from overhead high power lines and any contaminated soil or groundwater areas, and cautioned that the Piper/Montague area is probably not suitable for a school for those reasons. He also noted that in order to compete for State school funding, any new facility needs to be joint use between the City and the School District.

2. DEVELOPMENT CONTEXT—MIDTOWN SPECIFIC PLAN

The project area is within the area of the Midtown Specific Plan. The Midtown Specific Plan called for overlay zones promoting transit-oriented development at a density of 41-60 dwelling units per acre with a 20 percent reduction in parking requirements, and preparation of a coordinated development plan (precise plan) for several parcels, and the subsequent preparation of this Transit Area Specific Plan. As Table 2-1 shows, the Midtown Plan projects almost 5,000 new housing units—in comparison to its 1,224 units before plan adoption—and over one million square feet of office and retail development. The majority of this projected development is still to be constructed, although 1,050 to 1,200 additional multifamily housing units for the plan area have already been proposed or are under consideration.

Table 2-1: Midtown Plan — New Development

	Projected by 2025	*Approved not Built*	*Balance of Projection*
Residential (units)	**4,860**	**1,507**	**3,353**
Office (sq. ft.)	720,000		720,000
Commercial	361,000		361,000
Non-Residential Total (sq. ft.)	**1,081,000**		**1,081,000**

Of the Midtown Specific Plan area's overall projected growth, 2,000 housing units and 10,000 square feet of retail/dining uses are expected within the Transit Area Specific Plan. This development is allotted to the Great Mall/Montague, Montague/Trade Zone, and BART Station subareas (the other two subareas are not within the Midtown Plan area). Table 2-2 shows how the proposed amount of development in the Draft Preferred Plan compared to the development projected for the Transit Area in the Midtown Specific Plan. The Transit Area Draft Preferred Plan would more than double the projected residential development in those areas, provide far more commercial/retail space, and create office and hotel development where none was projected.

Table 2-2: Comparison of Project Development: Midtown Specific Plan and Transit Area Specific Plan

	Midtown Projection	*Draft Preferred Plan (RWCS)*	*Draft Alternative Plan (RWCS)*
Residential (units)	**2,000**	**7,185**	**5,601**
Office (sq. ft.)	-	813,343	762,732
Commercial	10,000	520,026	470,795
Hotel	-	175,500	175,500

3. ECONOMIC AND DEVELOPMENT ISSUES

MARKET ANALYSIS

Table 3-1 provides a high-low range of real estate market demand forecast for the Specific Plan Area. The residential demand figures only cover fair market housing.

More detail is provided in the full report, which is attached in Appendix A.

Table 3-1: Market Demand Summary Forecast—Milpitas Midtown Transit Subarea

	LOW FORECAST				*TOTAL*
	2006-2010	*2011-2015*	*2016-2020*	*2021-2025*	*2006-2025*
Retail (SF)	30,000	180,000	120,000	30,000	360,000
Office (SF)	60,000	200,000	360,000	580,000	1,200,000
Lodging (SF)		107,286	0	0	107,286
Lodging (Units)	0	150	0	0	150
Residential (Units)	820	1,040	940	800	3,600
Townhouses	*300*	*300*	*140*	*0*	*740*
Apartment	*160*	*440*	*400*	*400*	*1,400*
Condominiums	*360*	*300*	*400*	*400*	*1,460*
	HIGH FORECAST				
	2006-2010	*2011-2015*	*2016-2020*	*2021-2025*	*2006-2025*
Retail (SF)	50,000	200,000	180,000	70,000	500,000
Office (SF)	60,000	280,000	440,000	660,000	1,440,000
Lodging (SF)		143,000	0	125,000	268,000
Lodging (Units)	0	200	0	150	350
Residential (Units)	950	1,200	1,150	1,100	4,400
Townhouses	*350*	*400*	*210*	*0*	*960*
Apartment	*200*	*400*	*440*	*600*	*1,640*
Condominiums	*400*	*400*	*500*	*500*	*1,800*

Source: Economics Research Associates

FISCAL ANALYSIS

Development as proposed in the Draft Preferred Plan will provide substantial tax revenue to the City over the next 25 years, particularly the ownership housing which is reassessed as units are sold over time. A large portion of this revenue will flow to the Milpitas Redevelopment Agency (MRA), which controls all of the Transit Area except the Piper/Montague subarea. These increases in tax revenue cannot be transferred to the City's General Fund, which would consequently run a deficit. One possible solution to cover the General Fund deficits—and the assumption made by Economic Research Associates in their analysis—is to increase the annual Community Development Fund for residential uses in the Transit Area.

Table 3-2 summarizes the revenues and costs under both plan scenarios, while Table 3-3 compares the CDFs in different scenarios. The full fiscal impact report is provided in Appendix B.

Table 3-2: Cumulative Fiscal Impact from 2006 through 2030 (in Millions)

Draft Preferred Plan	
New Tax Increment Revenue for Redevelopment Agency	$403
Additional General Fund Cost & Revenue for City	
New Property Taxes	$55
New Sales Tax	$57
New Transient Occupancy Tax	$39
New CDF Revenue ($550 per unit annual assessment)	$83
New Service Cost	($232)
Net Cumulative Cost Revenue Balance 2006-2030	$25
Combined RDA and General Fund Impact	*$406*
Draft Alternative Plan	
New Tax Increment Revenue for Redevelopment Agency	$303
Additional General Fund Cost & Revenue for City	
New Property Taxes	$50
New Sales Tax	$54
New Transient Occupancy Tax	$39
New CFD Revenue ($350 per unit annual assessment)	$41
New Service Cost	($183)
Net Cumulative Cost Revenue Balance 2006-2030	$1
Combined RDA and General Fund Impact	*$304*

Table 3-3: Community Facilities District Fees Proposed

	Status Quo	*Draft Preferred Plan*	*Draft Alternative Plan*
New Housing Units	2,000*	7,185	5,600
CDF (annual per housing unit)	$311	$550	$350

*Projected for Transit Plan area by Midtown Specific Plan

Under the Draft Preferred Plan, the Milpitas Redevelopment Agency collects $403 million in tax increment revenue over the next 25 years resulting from fairly high-density housing and other development. This strategy allows the Milpitas Agency to meet its remaining $87 million obligation to Santa Clara County, which needs to be paid over the next 18 years. In addition, the Agency would have considerable resources to provide much need capital improvements that make this Transit Area a more desirable community, including the important pedestrian pathways that will link future neighborhoods to the transit stations. However, because of the large added population and employment requiring municipal services, the Milpitas General Fund will run a substantial deficit and the annual CDF assessment would need to be set at $550 per new units for this alternative to not show a General Fund deficit. The cumulative fiscal impact over the 2006 through 2030 period for the City and Redevelopment Agency combined is a positive $406 million.

The Draft Alternative Plan reduces the number of housing units with all the other development assumptions remaining the same. With this lower density alternative, the Milpitas Redevelopment Agency collects only $303 million in tax increment revenue over the next 25 years, but the City's General Fund achieves an essentially breakeven position with the CDF annual assessment increasing to only $350 for new units. The cumulative fiscal impact over the 2006 through 2030 period for the City and Redevelopment Agency combined is a positive $304 million.

In deciding on a final plan for the Transit Area, the City needs to balance regional transportation objectives with the Redevelopment Agency's tax increment needs and the General Fund's solvency requirements. Regardless of where the City decides that balance point to be, the following recommendations would improve the City's overall fiscal position going forward:

- Relative to their size, land requirement and traffic impact, hotel development is highly productive in terms of General Fund revenue. This Transit Area is likely to have two or three short windows of hotel development opportunity in terms of market demand. The Specific Plan should at minimum reserve two hotel sites for future development.
- Developers and operators of full service hotels, which typically command higher rates and generate more food and beverage sales tax revenue than limited service hotels, will likely find this Specific Plan Area much more attractive if future development includes a "lifestyle retail" district of pedestrian scale offering a wide variety of restaurants augmented by specialty shops and entertainment venues.
- Retail development, particularly life style retail, will be important not only for the new sales tax it can bring to the City but also because it will induce higher quality hotel and residential development. The higher quality development will bring more tax revenue over time relative to the required service cost. The best opportunity for retail development within this planning area is the area across Great Mall Parkway from the front entrance of the Great Mall.
- In the event the Specific Plan is to move toward lower densities, it would be fiscally superior for Milpitas to reduce densities in the Piper–Montague Subarea which is outside of any Redevelopment Areas.

SAN JOSE LAND USE

City staff met with San Jose staff regarding the area that borders the project area. San Jose does not plan to change their General Plan or the zoning for that area, although they may receive small individual applications for a change in land use.

AFFORDABLE HOUSING ASSUMPTIONS

It is assumed that 20 percent of units will be below-market-rate, consistent with City policy as stated in sections XI-10-8.10 and XI-10-38.10 of the City zoning ordinance.

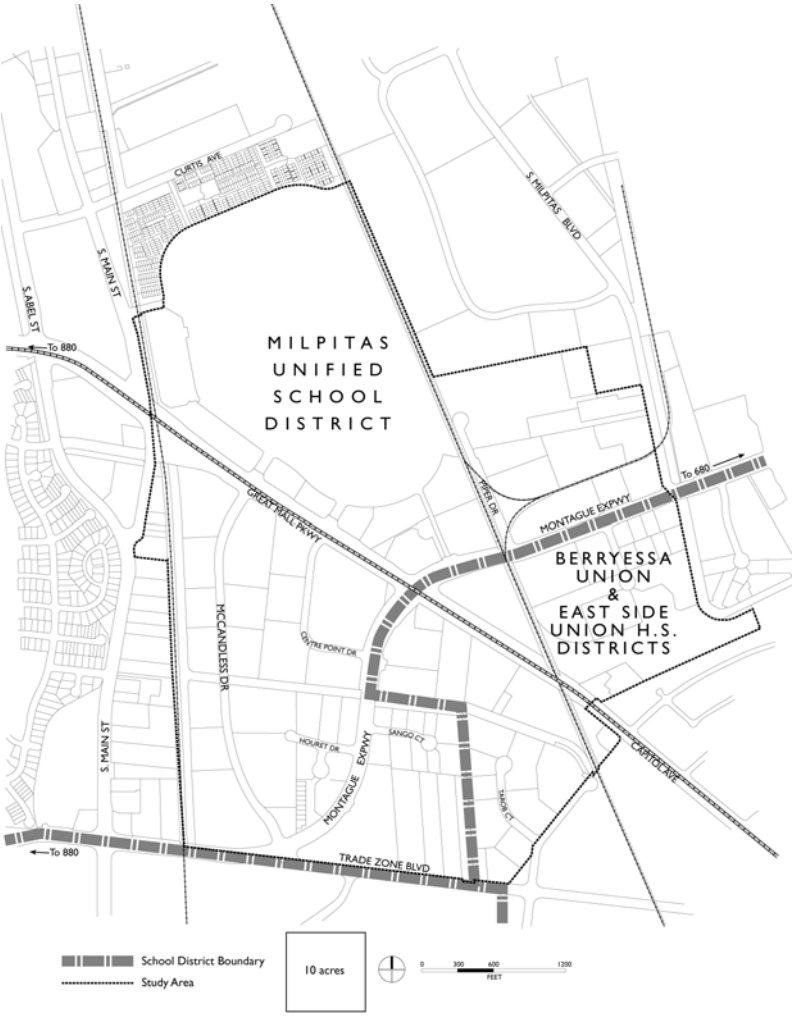
4. PUBLIC SERVICES AND FACILITIES REQUIRED

SCHOOLS

The study area falls within three different school districts, as seen in Figure 4-1. The area north of Montague Expressway—plus a small section east of it—lies within Milpitas Unified School District (MUSD), which handles students in grades K-12. The rest of the study area falls within Berryessa Union School District (grades K-8) and East Side Union High School District (grades 9-12). The project will create residential development in all three districts, bringing more students into their systems.

This section explores how many students will be added to each district and the resulting impact. Much of the data and background information in this section was provided by Tom and Vicki Williams of Enrolling Projecting Consultants, who serve as demographic consultants to both school districts.

Figure 4-1: School District Boundaries



Student Generation

The estimated numbers of students resulting from the residential component of the project are based on attendance data from Milpitas, Berryessa, and East Side Union schools, with variations by school district, grade group, and housing type.

An average number of students per housing unit was computed for all market-rate and below-market-rate attached dwelling units built in these districts from 1997 to early 2003. These rates were then calculated against the number of housing units proposed for each school district's area, with an estimated 20 percent of units below market rate.

Table 4-1 lays out the different school districts' generation rates. Generation rates vary over time as young families grow up and a residential area matures, but this approach gives a sense of the effect the project will have on local schools. In addition, the MUSD needs to take into account the estimated number of students from the nearby proposed Bay Stone Condos, The Paragon, and Aspen Villages residential developments, which are external to this project. Between them, they will generate an estimated 72 elementary, 22 middle, and 41 high school students.[1]

Table 4-1: Student Generation Rates (students per housing unit)

	Market-Rate Housing	*Below Market-Rate Generation*
Milpitas Unified School District		
K-6	0.087	0.255
7-8	0.017	0.033
9-12	0.030	0.082
Berryessa Union School District		
K-5	0.046	0.300
6-8	0.016	0.159
East Side Union HS District		
9-12	0.016	0.165

Source: Enrolling Projection Consultants.

Table 4-2 shows the estimated numbers of students from the Draft Preferred and Draft Alternative plans, in the reasonable worst case scenario. The projected student enrollments are based on the maximum number of housing units permitted under a particular plan, based on residential density limits.

[1] Email from Dennis Carrington, Senior Planner for the City, based on his conversation with Karl Black, MUSD Superintendent, 1 November 2005. These numbers are very similar to those attained by using project rates from Enrolling Projection Consultants.

Table 4-2: Projected Student Enrollment in Reasonable Worst Case Scenario

	Draft Preferred Plan	*Draft Alternative Plan*
Milpitas Unified School District		
Housing Units	*4,852*	*4,033*
K-6	585	486
7-8	98	81
9-12	196	163
Total Students	*879*	*731*
Berryessa Union & East Side Union HS districts		
Housing Units	*2,333*	*1,568*
K-5	226	152
6-8	104	70
9-12	107	72
Total Students	*437*	*294*

Capacity of School Districts

Zanker Elementary is the closest elementary school and the only MUSD school in the area. As of the 2005-06 school year, Zanker had an enrollment of around 450 students, with a capacity for around 540 students, although this extra space will likely be taken up by approved residential developments on South Main. Students from new housing built within the MUSD boundaries would attend Rancho Milpitas Middle School, which currently has an enrollment around 685 students with capacity for more students, although of an unknown amount. Meanwhile, the enrollment of Milpitas High School will be increased by around 163 to 196 students. As of the 2004-05 school year, Milpitas High School had an enrollment of around 2,800 students in a facility built for 2,100 students. The MUSD is unlikely to build another high school to accommodate the students from the project; the construction of a new on-site building is more likely.

Both school districts south of Montague Expressway—Berryessa Union and East Side Union High—have existing capacity for more students and will likely not need to add new school sites to accommodate increased demand, according to Enrolling Projecting Consultants. Consequently, the provision of land for any district expansion is not necessary.

New MUSD School

The student generation and capacity information suggests that the project would require a new K-6 or K-8 school for Milpitas Unified. This project would generate a demand of around 567 to 683 K-8 students in the MUSD. Elementary schools in the district have an average size of around 500 students and there are 700 students in the district's two grade 7-8 middle schools. Other new developments allowed under the Midtown Specific Plan would generate additional demand of students. The 1,507 new dwelling units approved but not yet built should generate around 275 students, which would exceed the available existing capacity at Zanker Elementary.

State Site Selection Criteria

The State of California has standards for school site selection. While exceptions can be granted, the regulations that most apply to the Transit Area are:[2]

- At least 100 feet from 50-133 kV power lines;
- Sites within 1,500 feet of a railroad easement require a safety study;
- Not adjacent to a road or freeway that will create safety problems or noise that will adversely affect the educational program;
- Not on major arterial streets with a heavy traffic pattern, unless mitigation of traffic hazards and a plan for the safe arrival and departure of students appropriate to the grade level is provided;
- Cannot be within an area of flood inundation, unless the cost of mitigating the flood is reasonable;
- Not located near an above-ground water or fuel storage tank, nor within 1,500 feet of an above ground or underground pipeline that can pose a safety hazard;
- Not subject to moderate to low liquefaction; and
- Zoning of the surrounding properties shall not pose a potential health or safety risk to students or staff.

School Site Size

The State also has recommendations for site acreage, although a smaller site can be selected if adequate land is unavailable even after considering eminent domain, so long as the district demonstrates how an adequate education including physical education will be provided. The Department of Education's standards for school site size varies depending on the number of students and their grade. The acreage requirements for a school, based on the reasonable worst case scenario number of students to be generated by the project, are shown in Table 4-3. The required site size for the reasonable worst case scenario of development is 9.2 or 10.4 acres for a K-6 school and 13.6 or 15.1 acres for a K-8 school, with the higher figure indicating additional space needed to implement a classroom size reduction policy. The Draft Alternative Plan would require almost the same site size, less 0.4 acres.

A brief study was conducted of school sites in the Bay Area, targeting schools that have 600-900 students and are located in an urban or dense suburban part of the Bay Area. K-8 schools in particular were sought out. Table 4-4 shows the total building square footage and site size for nine schools. Most schools are located on 5 to 10 acres, and up to 15 acres. Many of these schools are on sites that are smaller than State requirements; given that several of these were constructed within the last few years, this suggests that they applied for an exception based on a lack of available affordable land.

[2] The full list of school site regulations can be found at http://www.cde.ca.gov/ls/fa/sf/title5regs.asp

Table 4-3: State Recommended Site Size for new K-8 MUSD School (Acres)

	Kindergarten[1]	*Grades 1-3*	*Grades 4-6*	*Grades 7-8*	*Total (K-8)*
Projected Students	*84*	*251*	*251*	*98*	*683*
With Classroom Size Reduction (CSR)					
Physical education	0.71	1.3	4.4	2.7	9.1
Buildings & grounds	0.16	1.5	1.5	1.6	4.8
Parking and roads		0.4	0.4	0.4	1.2
Total Acres (CSR)	***0.9***	***3.2***	***6.3***	***4.7***	**15.1**
Regular (without CSR)					
Physical education	0.44	1.3	4.4	2.7	8.8
Buildings & grounds	0.09	1.2	1.2	1.4	3.9
Parking and roads		0.3	0.3	0.3	0.9
Total Acres (Reg)	***0.5***	***2.8***	***5.9***	***4.4***	**13.6**

1. With CSR, up to 40 kindergarten pupils can be taught in one classroom in two half-day sessions; without CSR, up to 50 pupils.

Source: California Department of Education, Guide to School Site Analysis and Development, 2000.

Table 4-4: Comparable School Site acreages

School	*District*	*City*	*Grades*	*Enrollment*	*Building Sq. Ft.*	*Site Size (acres)*
Callejon School	Santa Clara Unified	Santa Clara	K-8	900 (capacity)	74,500 in 5 buildings	7.5 + 7.5 shared space for playgrounds
Cesar Chavez Education Center	Oakland Unified	Oakland	K-5	600	95,000 in 3 buildings	8.0
Chavez Elementary	Alum Rock Union Elementary	San Jose	K-6	764	56,205 in 8 buildings	14.5
Cherryland Elementary	Hayward Unified	Hayward	K-6	897	103,647	6.7
Harder Elementary	-	-	-	695	45,300	7.8
Longwood Elementary	-	-	-	759	40,300	10.5
Garden Gate Elementary	Cupertino Union	Cupertino	K-6	709	50,163	10.0
Belle Haven Elementary	Ravenswood City Elementary	Menlo Park	K-8	726	37,360 in 10 units	7.63
Horace Mann Elementary	San Jose Unified	San Jose	K-5	550	86,180	3.0

A joint use school—such as the new Callejon School in Santa Clara, which devotes a city park exclusively to school use during school hours—would take up more space but would supply the study area with a much needed park. The State school siting regulations allow joint use facilities—such as parks and libraries—to count toward the recommended acreage. MUSD may also wish to consider the design model of the new Horace Mann Elementary School in downtown San Jose, which has a multi-story building wrapped around playground space (see Figure 4-2).

Figure 4-2: Layout of Horace Mann Elementary School, San Jose
Source: Horace Mann homepage, http://hme.ca.campusgrid.net/home

Part of the project area located south of Montague Expressway was previously part of the MUSD, until transferred to Berryessa Union in the 1960s. It may be possible for the MUSD to regain this land, although it may take many years and inflict compensatory fees. Consequently, a school site within the MUSD is the best option. If possible, the school should be located north of Montague Expressway, due to the physical barrier and safety risk to students from high speed and volume auto traffic.

Conclusions & Implications

A site needs to be identified for a new Milpitas Unified K-8 school for 660 to 775 students (or 580 to 680 students for a K-6 school) in a location north of Montague Expressway. This figure includes students from the project area plus the Bay Stone Condos, The Paragon, and Aspen Villages developments. The site, which needs to take environmental considerations into account, should be dual use, including a city park available to the public outside of school hours. Based on school site sizes in comparable city forms, 5 to 15 acres are required for the school.

No special actions need to be taken for the other school districts.

PARKS AND OPEN SPACE

The Midtown Specific Plan project establishes the open space requirements for the Transit Area. The Midtown Specific Plan envisioned three types of open space within its boundaries: Public Parks, Common Open Space, and Private Open Space. Parks are required at a ratio of 3.5 acres per 1,000 people, with at least 2.0 of those acres publicly accessible. This Public Park land requirement must be satisfied by either dedication of land to the City for public parks and open space, or payment of an in-lieu fee (City of Milpitas Zoning Ordinance, XI-10-8.07). The entire Milpitas Transit Area Specific Plan assumes these requirements even though the Piper/Montague subarea falls outside the boundaries of the Midtown planning area.

In order to quantify Parks and Open Space requirements the first step is to determine the total population anticipated based on the number of dwelling units in the plan. Given the planned higher densities in the study area, the City's multiplier of 2.52 persons per unit (for structures with more than five units) determined the estimated range of population for the Transit Area. Table 4-5 shows the reasonable worst case scenario population estimates and required Public Park space for the Draft Preferred and Draft Alternative plans.

Table 4-5: Required Public Parks and Open Space

	Draft Preferred Plan	*Draft Alternative Plan*
Total Population (RWCS)	18,106	14,115
Total Required Public Park Space (acres)	**36.1**	**28.2**

The Midtown Plan defines Public Parks as community open space that is publicly accessible and programmed for public use. Private developers provide Common Open Space and Private Open Space for the recreational purposes of residents within the private developments; they include balconies, porches, or roof decks when properly developed for work, play, or outdoor living area (City of Milpitas, Zoning Ordinance, XI-10-38.07). Private development within the Transit Area must meet the open space requirements on a project-by-project basis. Therefore, the remainder of this section will address the public open space and focus on the quality and distribution of Public Parks and as an amenity.

Public Parks in the Transit Area Specific Plan have three main forms: Parks/Plazas, Linear Parks, and Landscape Buffers. Parks/Plazas, intended to be more urban in form, are the focus of new development in each subarea by providing a physical center to the neighborhoods. The Linear Parks occur along rail and water rights-of-way to connect and unify the subareas with bike and pedestrian trails. The Landscape Buffers define the major arterial roadways that bisect the study area, separating the heavy traffic from the high density office and residential uses along Montague Expressway and Great Mall Parkway.

The two plans distribute open space uniformly throughout the Study Area, given the major vehicular arteries which separate each subarea. The Montague/Great Mall subarea has a different configuration of parks to provide for a larger scale of community facilities, possibly including a school site. Special care was also taken to designate parks sites which span multiple property owners and do not take up all of one owner's land (as that owner would receive fair market value from the City but be unable to take advantage of profit or revenues from land develop-

ment). Park sizes were revised from the original concept plan to be consistent with the City's park requirements and the new total amount of proposed residential development. Some larger parks were included to accommodate playing fields, which the City's Parks and Recreation Department indicated are greatly needed.

It is recommended that the City consider a credit that allows up to 20 percent of the Landscape Buffer area to count towards the Public Park requirements, when the Landscape Buffer area includes trails or wide sidewalks connected to an overall pedestrian/bike circulation network. With such an allowance, both plans meet the public park requirements

Table 4-6: Public Parks and Open Space Provided (acres)

	Draft Preferred Plan	*Draft Alternative Plan*
Linear Parks	14.92	14.92
Parks/Plazas	16.51	13.85
Subtotal	*31.43*	*28.77*
Landscape Buffers-20% credit	5.6	5.6
Total Open Space Provided	**37.03**	**34.37**
Total Open Space Required	**36.1**	**28.2**

PUBLIC SERVICES

More detail is provided in the water and sewer capacity impacts report, attached as Appendix C, and the full infrastructure development report, which is attached as Appendix D.

Sewer

The current City of Milpitas (City) wastewater treatment capacity need is addressed in the 2004 City of Milpitas Sewer Master Plan Update. The City's wastewater treatment capacity of 12.5 million gallons per day (mgd) at the San Jose/Santa Clara Water Pollution Control Plant (WPCP) is expected to be reached around 2015, based on projected General Plan land use projections. However, since flows vary from year to year, the plan recognizes that its available capacity may be exceeded as early as 2010. To meet General Plan needs, the City is therefore purchasing an additional 1 mgd of capacity from West Valley Sanitation District (WVSD). The purchase would result in a total capacity to 13.5 mgd, enough to provide for the General Plan buildout. The General Plan includes Mid-town specific plan but not the proposed Transit Area Specific Plan.

Preliminary evaluation shows that up to 1 mgd of additional wastewater treatment capacity may be needed to handle the wastewater flow generated by the proposed Transit Area Specific Plan development under a reasonable worst-case scenario. Excess capacity is available from the WPCP through an interagency lease agreement or acquisition, similar to the purchase the City has arranged with WVSD. One mgd capacity is estimated to cost approximately $7 million in March 2006 dollars. Further analysis will be necessary to determine specific improvements within the Specific Plan.

Water

Potable water demands for residential, commercial, and mixed use development areas are generally higher than for industrial development. In particular, high and very high density residential development can have significantly higher demands than industrial development, with water use factors ranging from 270 gallons per day per dwelling unit (gpd/DU) to 800 gpd/DU for residential compared with 1,250 gpd/acre to 1,600 gpd/acre for industrial. The Water Master Plan estimates the overall water demand within the city to rise from 12.4 mgd to 16.6 mgd at build-out (including the Midtown Specific Plan area).

While the existing storage available will not be enough to accommodate the increased demands, the available supply of treated water from SCVWD should be sufficient to meet demand. Further analysis is required to determine more precisely what improvements will be necessary to accommodate the expected increase in potable water demand.

Current City policy requires new commercial or industrial users within reasonable proximity of existing recycled water mainlines to use recycled water for landscape irrigation. Additionally, the 2001 Midtown Specific Plan, which includes much of the Transit Area, requires new development in the area to include recycled water lines for irrigation, and for existing irrigation users to convert to recycled water for irrigation as soon as feasible. Existing recycled water lines extend into most of the Midtown Transit Area and the proposed new development areas. For recycled water service to reach the entire area, new mainlines must be installed extending to the east along Great Mall Parkway and East Capitol Avenue.

Stormwater and Flooding

According to the 2001 Storm Drain Master Plan, the area requires some improvements under the previous development plans within the Midtown Transit Area including: 1) constructing a new parallel 48-inch culvert beneath Montague Expressway at Piper Drive and 2) replacing an existing 30-inch pipe with a 36-inch pipe to drain the low end of Tarob Court. A table listing all proposed storm drain capital improvement projects is located in Appendix D.

With development plans for the Midtown Transit Area generally changing land use from predominantly industrial to high density residential and commercial, stormwater runoff will likely decrease from previous estimates. Also, any future developments constructed one foot above the 100-year flood plain would not be required to buy flood insurance, while those under one foot must be covered by insurance. Further analysis is required to confirm that runoff would be reduced under development plans for the Midtown Transit Area. The City is also considering enhancements to Penetencia Creek which would reduce flooding and allow properties in the Transit Area to forgo purchasing flood insurance.

Utilities

The existing electrical substation capacity is likely to be adequate for the expected land uses in the Midtown Transit Area. However, a load analysis of the demands associated with the redevelopment plans will be required to confirm the capacity. New circuits requiring substructures and cabling should be installed when development occurs. Any improvements that need to be made to existing facilities will depend largely on the preferred voltage for future customers in the Midtown Transit Area.

Natural gas service can be provided to new land uses; however existing mains may need to be extended to provide natural gas to new development. In particular, areas where new roads will be constructed to accommodate new residential areas will require expanded gas mains.

It is likely that cable service lines will require extension in parts of the Midtown Transit Area in order to accommodate the future residential development. Expansion of service within the Midtown Transit Area will likely require installation of new service lines, however no other obstacles are expected to impede connections to new customers.

Construction of more densely-developed land within the Midtown Transit Area will require more connections to phone service than currently exists. There are no expected obstacles to extension of service to new residential and commercial customers; however it will likely require installation of more service lines to accommodate the new customers.

Conclusions & Implications about Public Services

Because of the nature of proposed changes to land use within the area, namely from a primarily industrial area to a residential and commercial area, the demands for potable water, sanitary sewer services, recycled water, as well as other utilities will increase. Utility coverage within the Midtown Transit Area is generally adequate for new development; however some utility improvements will be required to accommodate the redevelopment planned for the area.

PUBLIC SAFETY

Fire Department

Fire protection equipment is strongly influenced by the types of buildings that a fire department must cover. It is expected that the Transit Area could include the following structures:

- Town homes: 2-3 stories in height, with attached parking;
- Interlocked or stacked town homes: 3 stories, with attached parking;
- Town homes on a concrete podium: 2-3 stories, parking below podium;
- Apartments with surface parking: 3-4 stories;
- Apartments above one level of parking: 3 stories (like The Crossings development);
- Apartments/condos on podium, 1-2 levels of parking below, 3-4 stories wood frame above [most typical form or development];
- Retail, office, or townhouses wrapped around parking: 3-4 stories;
- Wood frame wrapped around a parking structure (like the project at Main St & Great Mall Parkway), 4 stories;
- Commercial buildings up to 4 stories - wood frame, podium parking below or detached parking structure;
- Concrete or steel, 7-9 stories max 75' to top floor, residential or commercial;
- 12 story high-rise, residential or commercial; and
- 12-24 story high-rise, residential or commercial.

These last three structural types are not likely to be constructed until later phases of development. The California Fire Code and the City's Municipal Code (see MMC V-300-2.39) address construction and design guidelines for fire protection. Communication systems, evacuation plans and community warning systems may also be necessary. All of these standards will be handled on a project by project basis.

The Milpitas Fire Department (MFD) states that additional staff will be required in order to provide the same level of service the community currently enjoys. A new station may be needed on two accounts. First, more personnel will be needed as the population of the city grows, roughly at the ratio of one firefighter per 1,000 residents, with 13,500 people requiring one engine company.[3] Second, firefighters need to reach emergencies within four minutes, a response time that is hampered by traffic congestion.

Given that the nearest fire station (Station #1) has no space for expansion to accommodate new personnel and equipment, and given its distance from the Transit Area and anticipated road congestion on Montague Expressway, it is anticipated that a new fire station will be required in or near the Transit Area. The fire station would need to have the capacity to house two engine companies, although only one needs to be staffed initially with a second added at a later date.[4] This new station would likely require around one acre of land located somewhere to the south of Montague Expressway, although not necessarily within the Transit Area, and annual operating costs of around$2.3 million in 2006 dollars.[5]

Ultimately, the MFD needs to conduct a “standards of cover” analysis to determine the Transit Plan’s precise impact on the department’s staffing and equipment, and any required facility enhancements. In addition, the MFD will need to write an addendum to the City’s emergency management plan to address the development of the project area.

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[3] An engine company serves 13,500 residents plus all the commercial space supported by this population. Ratios provided by Fire Marshal Patricia Joki in a meeting on March 22, 2006.

[4] Station #1 already has a ladder truck to handle high-rise incidents, and is located near enough to the plan area that additional ladder equipment is not required.

[5] Parcel size (based on Station #2) and fire station operating cost provided by Fire Marshal Patricia Joki in an email on April 14, 2006.

Police Department

Most of the crime that occurs in the plan area is specific to the Great Mall—thefts, forgery/fraud, and stolen vehicles, although little violent crime. In the rest of the plan area, more than half of the police-related calls are vehicle violations, traffic accidents, and theft from autos. Given the change in the land uses, traffic flows, and number of residents created by the plan, the nature of police needs in the plan area will probably change significantly.

The increase in population, business traffic, and vehicular traffic resulting from the buildout of the Transit Plan will increase the workload of the Milpitas Police Department (MPD). To maintain current levels of service, an increase in staffing will be necessary.

The metrics that MPD would use to determine the number of additional staff required are: projected call volume and impact in service levels, such as an increase in dispatch and response times; ring times for 9-1-1 calls; and calls that are pending for an officer. The number of service calls being received by the MPD is already increasing, rising 10.7 percent between 2004 and 2005, and the department expects the number of calls to continue increasing.

Conclusions & Implications about Public Safety

Approximately one acre of land south of Montague Expressway should be set aside for a future fire station. This set-aside land may become available for private development, however, if the MFD determines that a site outside the Transit Area is better suited for a new station.

The City should also anticipate investing in additional MPD communications and patrol staff. Any expansion in the Patrol Division would require an increase in the marked patrol vehicle fleet, as well.

5. TRANSPORTATION ISSUES

BART LINE LAYOUT AND STATION DESIGN

VTA is proceeding with design and environmental review of the BART line, and is retaining alternatives at this stage for above-ground and retained cut designs. The City has strongly stated a preference for the retained cut over the above ground option.

We continue to believe that the cut in the area between Montague and the Milpitas Boulevard extension should be covered, because the open trench will be a major divider that precludes a connected urban transit area on the two sides of the station. However we understand that is not being pursued at this time for cost reasons.

For the BART Station layout, we strongly recommend a different approach to parking, bus drop-off, and kiss-n-ride which is compatible with an urban transit village district. Our recommendations, as shown on the revised concept plan diagram, are:

1. Relocate the parking garage to the corner site, and reduce the height. The proposed parking structure is very efficient: three bay layout five stories tall, with 260 spaces per floor for a total of 1,300 spaces.
2. Access to the parking garage can be from both Capitol Avenue and Montague Expressway, with stacking lanes to keep cars off of those busy streets.
3. Locate the bus bays along streets; this is a more urban solution consistent with a transit village, and conserves space. The "bus yard" areas originally proposed would create a large paved area which is not pedestrian friendly.
4. Locate the kiss-n-ride and handicapped parking along Milpitas Boulevard extension.
5. Shorten the overall walking distances for pedestrians to the BART station, and make the connections pedestrian-friendly by reducing the travel lanes crossed. Use special paving in all areas indicated.
6. Create a BART Station plaza that concentrates pedestrian activity from the garage, the Capitol Avenue area, and kiss-n-ride.
7. Add a small retail building or kiosks between the LRT and BART stations, next to the plaza to serve BART riders, LRT riders, and residents. This will enliven the BART plaza. It can succeed due to street visibility, the concentration of pedestrian, and availability of short-term parking in the kiss-n-ride and on Milpitas Boulevard.
8. Locate a pedestrian overcrossing that connects the Piper-Montague area to the development site across Montague. Pedestrians can walk along the sidewalk and cross into BART station entrance.
9. Add a 40 foot landscape buffer on Montague, consistent with the Transit Area Plan. Provide a 20 foot landscaped buffer along Capitol Avenue. Provide a 20 foot area for a sidewalk and double row of trees on the west side of the potential development site.
10. Widen the sidewalk and median on Milpitas Boulevard, and add street trees to provide adequate pedestrian circulation and enhance the residential character of the area.
11. Add landscaping and attractive fencing around retained cut. Add a pedestrian crossing.

RAILROAD LINES AND SPURS

A spur railroad line used by freight traffic currently passes just north of Montague Expressway, through the Piper/Montague subarea. To maintain the transit-oriented nature of this plan, it is very important that this railroad "Y" spur line be relocated, as it cuts off the future BART line from many of its closest residents and is highly detrimental to the opportunity for an attractive residential neighborhood. If the spur remains, the streets in Piper/Montague will not connect with Montague Expressway, creating traffic congestion and increasing the walking distance from residences to the BART and light rail station. Furthermore, the spur line is noisy and unsightly, which will be detrimental to the sale of units and property values. BART would also have to build a longer above- or below- grade segment in order to avoid interference with the spur line, which may greatly increase construction costs.

There are two inter-related issues that hamper the relocation of the spur line. First, the spur line serves industrial businesses which have an entitlement to rail access. VTA has been investigating whether it is cost-effective for them to buy out the spur line service from these businesses. The City has not yet received dollar amounts, but initial suggestions are that the buyout may not be cost-neutral for VTA and therefore may require financial contributions from the current land-owners. City staff will work with VTA staff to determine the cost of the buyout and the amount of any landowner participation necessary. An alternative approach would be to move the spur line north of the Piper/Montague subarea and continue the freight service, but this would have a substantial impact on other properties and is unlikely to save BART any money.

The second issue is that, even if the spur line service is bought-out, Union Pacific will still need a train turnaround to be located at the end of its rail line that extends from the north. When BART is constructed, it will run along the current rail right-of-way and the existing Union Pacific line will terminate at Montague Expressway, leaving the freight trains needing a mechanism to turn around. The Draft Preferred Plan map shows the creation of a train turnaround on the north boundary of the Piper/Montague subarea. Further investigation about the exact length required for the turnaround is needed, but initial research indicates that it will avoid impacting the PG&E substation in the area.

This section will be updated with any further information that is provided by the City or VTA.

TRAFFIC IMPACTS

Traffic Analysis

A traffic analysis was completed to gain a preliminary understanding of the Transit Area Plan's potential traffic impacts. A full detailed traffic analysis of the preferred plan and alternatives will be prepared for the EIR, using the Santa Clara VTA model, and analyzing up to 52 intersections. The preliminary analysis focused on several key issues, as discussed below. It did not, however, include any growth projections related to other development that will affect the area over the next 20 years, such as: buildout of the Midtown Specific Plan; growth in other areas in Milpitas; and growth in surrounding areas of San Jose. That analysis will be necessary in order to have a full picture of traffic circulation issues and mitigations.

Existing Levels of Service at Key Intersections.

Range from C to E; none are at F. The existing levels of service (LOS) for ten intersections are provided in Table 5-1.

Table 5-1: Existing Intersection Levels of Service

	Peak Hour	*Existing*
Abel Street/Serra Way	AM	C+
	PM	C
Milpitas Boulevard/Calaveras Boulevard (SR 237)	AM	E+
	PM	D
McCarthy Boulevard/Tasman Drive	AM	C
	PM	C
Great Mall Parkway/Abel Street	AM	C-
	PM	C-
Main Street/Montague Expressway	AM	D
	PM	E
Montague Expressway/Great Mall Parkway	AM	D
	PM	E
Milpitas Boulevard/Montague Expressway	AM	C
	PM	C-
Montague Expressway/Trimble Road	AM	C
	PM	D
Capitol Avenue/Cropley Avenue	AM	D
	PM	D
Oakland Road/Murphy Avenue	AM	D
	PM	D

Source: Fehr & Peers

Number of Trips Generated by Different Alternatives.

Trips were calculated for three types of uses—commercial, hotel, office, and residential—and discounts applied for proximity to transit and a mix of land uses. Trips from existing industrial and research and development uses that will be replaced were subtracted. The average number of car trips per hour was then calculated for the AM and PM peak hours. Table 5-2 shows the estimated number of peak hour trips by land use at plan buildout.

Table 5-2: Trip Generation Estimates

	AM Peak Hour Total	*PM Peak Hour Total*
Existing uses that will be replaced	**(-3,003)**	**(-3,129)**
Draft Preferred Plan		
Commercial and Hotel	833	1,702
Office	1,193	1,193
Residential	4,010	4,889
Total	*6,036*	*7,784*
Net New (Increase)	***3,033***	***4,655***
Draft Alternative Plan		
Commercial and Hotel	772	1,565
Office	1,118	1,118
Residential	3,103	3,766
Total	*4,993*	*6,449*
Net New (Increase)	***1,990***	***3,320***

Source: Fehr & Peers

Existing trips are estimated as 3,000 at AM peak and 3,100 at PM peak. The Draft Preferred Plan would create around 3,000 net new AM peak trips and 4,650 PM peak trips, while the Draft Alternative Plan will generate fewer trips: 2,000 net new ones at AM peak and 3,300 additional at PM peak.

Trip Reduction Factors for Mixed Use and Transit-Oriented Development

The numbers in Table 5-2 include reductions in trip generation according to several features of transit-oriented development. For commercial uses, being mixed with housing reduces trip generation by 13 percent, being mixed with a hotel creates a 10 percent reduction, and drawing in passing by pedestrians drops trip generation by 25 percent. For office space, proximity to fixed rail reduces trip by 3 percent, and being mixed with housing causes another 3 percent reduction. Housing near fixed rail reduces residential trips by 9 percent.

Further research will be done to ascertain whether these reduction factors are correct for this specific area. It may be that a greater number of walking and transit trips should be assumed given the proposed pedestrian-oriented street layout, and the concentration of light rail and BART in the area.

Projected Trip Distribution and the Direction of Travel from Proposed New Development

The analysis assigned the likely direction of travel of various trip types. Residential trips are expected to go 63% to the south and west towards San Jose and Santa Clara, 30% north towards Alameda County, and 7% east of 680 to other parts of Milpitas. Commercial and office uses are expected to have similar directions of travel, but often with the peak traffic flows reversed. This is because the majority of residential-originating journeys are commuting trips to jobs in Silicon Valley or Alameda County in the morning with a return in the evening. Office-related trips come into Milpitas in the morning and leave in the evening. Commercial and hotel trips generate a lot more trips at the evening peak than in the morning.

Impacts of Intersection Level of Service from New Development in the Transit Area

The traffic analysis completed to date only examines the impacts of Transit Area Plan development, and not other development in Milpitas or San Jose. The ultimate levels of service at intersections could be quite different once that other development is factored in.

Key intersections were studied in Milpitas (7 in total) and San Jose (3 more), including the three main intersections in the study area—Milpitas Boulevard/Calaveras Boulevard (SR 237), Main Street/Montague Expressway, and Great Mall Parkway/Montague Expressway.

Three intersections are currently operating at level "E" during both AM and PM peak hours. All three are likely to go to an LOS of "F" in the Draft Preferred plan; two intersections go to "F" in the Draft Alternative Plan. The other seven intersections result in an LOS of C, D, or E.

Degree of Congestion Appropriate to Transit Areas

In high density urban areas, levels of service C, D, and E are typically considered acceptable during peak hours, especially near freeway/expressway exits. It is likely that under any development scenario—the current General Plan policies, the Draft Preferred Plan, or the Draft Alternative Plan—several of the intersections in the plan area will attain "F" levels of service sometime during the 25 year planning period. For many residents and commuters, both BART and the VTA Light Rail will offer an alternative to traffic congestion for at least some trips. Studies show that people are only motivated to use transit if there is some significant level of traffic congestion. Some level of traffic congestion is thus appropriate in areas where there is major public investment being made in transit infrastructure, and there is limited funding for new roads. Transit service would need to be frequent and available such that a transit trip does not add significantly more time to the commute.

Street Improvements and Traffic Mitigations

Several street improvements to the City and County network are planned over the next 20 years, which may help alleviate traffic problems. Key ones related to the study area include the extension of Milpitas Boulevard, and the widening of Montague Expressway and Calaveras Boulevard. The Environmental Impact Report to be prepared will identify other possible mitigations. However it will be critical to ensure the pedestrian-oriented character of the Transit Area, so that people can walk to transit, shopping, restaurants, etc. In some cases a street or intersection widening might help alleviate traffic congestion, but be highly detrimental to the overall character of the area. Those tradeoffs will be reviewed in discussions about the final recommended specific plan.

6. URBAN DESIGN

The pedestrian experience is the heart of the plan. For these neighborhoods to be vibrant and successful the streetscapes must be richly detailed, fine-grained, and provide good connectivity between desired destinations. To that end, the streetscape design, bicycle, and pedestrian connections are important implementation tools to achieve the desired character desired by the City for the new Transit Area Specific Plan.

Residential Neighborhood Design Issues

A series of high and very-high density residential neighborhoods will be at the heart of the Transit Area. These will bring an entirely new character and activity type to southern Milpitas, with clusters of 3 to 4-story housing developments surrounding parks and tree-lined avenues, and served by small amounts of local retail. Residential neighborhoods must include the following:

- Charming streets with sidewalks and street trees in planter strips next to the curb;
- Units front the streets;
- Average block size of two to three acres;
- Average of one curb cut per block face;
- Parks at the neighborhood center that create neighborhood identity and image;
- A small amount of local retail for each neighborhood;
- Parking located below ground, or behind residential units - exceptions require a use Permit;
- Reduced parking ratios due to proximity to transit - parking on streets serves as guest parking;
- Density is allowed to be averaged over a site or area, and is calculated on a gross basis including streets but excluding park land; and affordable housing requirements.

Streetscape Design Issues

Good streetscape design has the potential to catalyze private development and define the adjacent land use to establish district character. Potential streetscapes and design opportunities in the Transit Area Specific Plan are listed below.

Great Mall Parkway/Capitol Avenue

Great Mall Parkway through its entire length across the study area is recommended to become a half-multiway boulevard. Typically, the multiway boulevard consists of a central roadway, for fast-moving through traffic, with narrow access roads on both sides, for local traffic. Medians with well-defined pedestrian elements typically divide the roadways. The proposed solution along this corridor envisions half of this typical section fronting the new development—with a new local serving street providing parallel parking on each side separated from the main road by a tree-lined median.

McCandless Drive

The existing canopy trees along McCandless Drive offer an excellent opportunity to utilize mature vegetation to define the character of a new residential neighborhood. Incorporating the trees and the landscape berm into the new streetscape will require extra coordination during new development, but offers great added value given the excellent condition of the trees.

The City Arborist reports that the existing trees are mature and well-established; any modification of the berm along McCandless Drive would constitute tree root impact. Because the majority of these trees are protected by the City of Milpitas tree ordinance, she recommends that a tree protection plan be completed for any project in its earliest stages (Randisi, 2005).

Milpitas Boulevard Extension

A new road, the Milpitas Boulevard Extension, is planned through the BART Station subarea. This new boulevard is conceived to be a neighborhood-scaled street with a narrow right-of-way, parallel parking, and frequent street trees. In the area of the BART station the new roadway widens to accommodate bus and automobile traffic that serve the station. To prevent high-speed through traffic a series of calming measures should be designed into the street to maintain its pedestrian scale. A central median planted with trees is recommended to establish an attractive residential character on this connector street which may experience heavy traffic volume.

Montague Expressway

Montague Expressway is envisioned to be a broad parkway with deep landscaped setbacks lined with high density office and residential buildings. A wide sidewalk with a double row of trees should separate pedestrians from the fast-moving traffic. Land use along Montague Expressway is intended to be flexible to encourage market forces to allow higher density development along the edges to frame the parkway design. The taller buildings and greenery bordering the wide right-of-way will give it and the City of Milpitas a strong identity at a gateway point near its transit core. Key aspects of this development type include:

- Office, medical or hotel uses, with ground floor retail or restaurant uses permitted;
- Residential uses permitted up to 35 percent of total uses (or one square foot of residential per two square feet of nonresidential);
- Deep landscape setback;
- Tall buildings encouraged;
- Public open space away from the expressway; and
- Not pedestrian oriented along expressway.

An example of this scale of development in Milpitas is the Embassy Suites at I-680 and Calaveras Boulevard.

Bicycle and Pedestrian Connections

In order to meet the goal of having interconnected, walkable neighborhood centers, well-integrated bicycle and pedestrian connections must be developed parallel with the land use

plan. The plan offers a number of important pedestrian connections to aid in this goal. These connections will be further developed in conjunction with the Transit Area Specific Plan; a preliminary list is included below.

- Pedestrian and bicycle bridge over Montague Expressway at Penitencia Creek;
- Pedestrian and bicycle bridge over Montague Expressway at Piper Drive;
- Pedestrian and bicycle connection from Piper Drive to the Great Mall;
- Pedestrian connections between the VTA Light Rail and the BART station;
- Centre Point Drive to Great Mall pedestrian linkage;
- McCandless Drive to Great Mall pedestrian linkage;
- Capitol Avenue/Milpitas Boulevard Extension pedestrian crossing; and
- Great Mall Parkway/Montague Expressway intersection.

Potential Constraints to Streetscape Design, and Bicycle and Pedestrian Connections

The proposed streetscape designs components, and bicycle and pedestrian connections will require careful coordination with existing utilities, rights-of-way, and ongoing proposals for the BART station plan. The final design of the BART line along Piper Drive—whether elevated or retained cut—will greatly affect the neighborhood connectivity and will ultimately determine the type of connections possible. Details of the BART Station design and project phasing will greatly impact the intensity of use adjacent the station. While the project goals are not dependant on the station design, the character of the district and neighborhoods will be enhanced if the station follows an urban model of development—one of compact development with structured parking that is integrated into the established street grid.

Existing traffic patterns along the major arterials, Great Mall Parkway and Montague Expressway, limit the crossing opportunities. In the case of Montague Expressway the width of the existing roadway and the speed of the traffic further inhibit the goal of walkability. Similarly, the proposed Great Mall – Montague Expressway "Urban Interchange" has the potential to dramatically limit pedestrian connections to the BART Station and may limit other Specific Plan goals from being attained. One possible mitigation is to construct a traffic island that provides a safe staged destination for pedestrians and contains an informational or retail kiosk as a draw.

Additionally, existing land uses that are likely to remain in their current state may also impact the implementation of the urban design goals by limiting opportunities for land acquisition.

7. ENVIRONMENTAL ISSUES

Brief descriptions of applicable findings and implications are below.

AIR QUALITY

The project will probably exceed air quality thresholds, a result that is a largely unavoidable and significant impact, similar to other comparable large-scale projects in the Bay Area. A travel demand management (TDM) program may be required to help mitigate this issue, with elements such as employers paying public transit costs for workers. If a project implements all the measures indicated by the Bay Area Air Quality Management District (BAAQMD), emissions from construction activities would be considered less than significant.

This analysis did not consider the proximity of the proposed new development to existing and proposed transit facilities, which would likely serve to lower the number of vehicle trips associated with developed of the area. Despite this discount, given the intensity of the development proposed, it is unlikely that the proposed Specific Plan could be developed without an increase in emissions above BAAQMD's significance thresholds.

BIOLOGY

The potential impacts of the project on biological resources involve burrowing owls, nesting birds, and locally significant trees.

Each building site will be required to conduct a four-step survey protocol to document the presence or absence of burrowing owl habitat, evaluate burrowing owl use of the site, and establish a buffer zone.

Due to the extensive number of existing trees, nesting birds could be an issue during breeding season, which is a roughly six month window of time. A bird survey during the season would be required, and construction could be subject to limitations depending on the results.

A Tree and Planting Ordinance of the City of Milpitas exists to protect significant trees, including heritage trees and groves, throughout the city. To remove any protected tree a tree removal permit is required and compensation for lost trees may be requested.

NOISE

Noise will occur from four sources of note: light rail, BART, vehicular traffic, and freight trains. The light rail line will not generate noise above ambient levels. For the other three noise sources, however, noise insulation features will likely be required.

Residential areas along Great Mall Parkway, Montague Expressway, and Piper Drive could be located in areas where ambient noise levels currently exceed 60 dBA DNL. The land use compatibility standards contained in the Noise Element of the City of Milpitas General Plan indicate that development of single-family residences in areas with an ambient noise levels greater than 55 dBA DNL and development of multi-family residences in areas with an ambient noise levels greater than 60 dBA DNL are "conditionally acceptable."

Exterior noise levels in open space areas may require specific design measures, such as orienting balconies away from street frontages, to reduce, for example, noise in backyards or balconies.

Relocation of railroad tracks could potentially alter the existing noise environment at the nearest residences, particularly during nighttime hours. Moreover, if the BART station and rail line were to be built above ground, it would be particularly important to discuss the impact of BART noise on sensitive receptors in the area, as elevated BART train pass-by events can exceed 80 dBA at the ground level. Also, since BART will not share right-of-way, commercial train traffic will be shifted to the railroad located between McCandless Drive and Main Street.

HAZARDOUS MATERIALS

In general, it is not easy to address the specifics of smaller parcels, but we can characterize the types of contamination typical in the area and provide a general mitigation measure that requires individual assessment of the site. Overall, the project area has two known sites where investigation or remediation is not complete—at the northern end of Piper Drive and toward the northern end of Tarob Court—and 39 sites with present or historical hazardous material use or generation. Another 11 sites have completed their investigation or remediation. Specific information on the nature and extent of the hazardous materials at these sites would require reviewing all records at the Santa Clara County Health Department and the Regional Water Quality Control Board.

Regarding the placement of a public school within the Transit Area, the school district would need to undertake an environmental assessment prior to purchasing a specific site. The Department of Toxic Substance Control (DTSC) regulates remediation at school sites and they have tough regulations that include public noticing and public hearings; the California State Department of Education must coordinate cleanup with DTSC. For a potential park and/or school site on Houret Drive, a preliminary environmental conditions evaluation and subsequent hazardous materials records search did not reveal any obvious threat of soil or groundwater contamination at, or in the immediate vicinity of, the potential school site.

GEOLOGY

The entire project area is in a liquefaction zone, but conformance with state and local building codes reduces this factor to insignificance. Being in a liquefaction zone is common to all locations along San Francisco Bay; it does not specifically prohibit any type of construction.

Implementation of erosion-control measures, required by National Pollutant Discharge Elimination System (NPDES) permit standards, would minimize soil erosion associated with grading or trenching activities during redevelopment.

CULTURAL RESOURCES

The Milpitas Midtown Specific Plan, adopted in 2002, reviewed the cultural resources of the project area as a part of its Existing Conditions report (completed in 2000). The City's Historic Sites Inventory, published in 1990, contains a set of many of the significant sites and structures within Milpitas. These reports found the following regarding cultural resources within the Transit Area.

- No prehistoric sites are located within the project area, although a shellmound related to a prehistoric Costanoan village is located just to the northwest of the study area, west of Abel Street near its intersection with Curtis Street. This site is a numbered archeological resource, CA-SCL-38.
- The alluvial soil of the area may contain currently unknown artifacts and remains 3 feet below the ground surface.
- Neither of the city's two structures in the National Register of Historic Places is in the study area.

In addition, along McCandless Drive, there are locally significant trees which the plan should consider preserving and incorporating into the design of the project area. Since the majority of the trees on McCandless are large enough to be protected by the City tree ordinance, an arborist report and tree protection plan has been recommended to be incorporated into the project in the early planning stages.

With the exception of these trees, the plan does not need to accommodate any cultural resources. However, prehistoric findings may come up during site excavation. The City and developers should be prepared to handle prehistoric artifacts or remains discovered during site construction.

References

Milpitas, City of. Zoning Ordinance of the City of Milpitas, XI-10-8.07, Park and Open Space Requirements for Residential Uses

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